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ABSTRACT

An interim evaluation was conducted to determine the impact of the National Supported Work Demonstration (NSWD) on employment of four target groups: Aid for Dependent Children (AFDC) recipients, ex-drug-addicts, ex-offenders, and youths. The evaluation was based on data collected in interviews with 2,830 persons--1,419 of whom were offered supported work jobs, and 1,400 of whom were members of a randomly-selected control group at twenty-one sites--and provides information on the employment and earnings, welfare receipt, drug use, and criminal activities of both groups during an eighteen-month period after their enrollment in the sample. The evaluation suggests that supported work has succeeded in achieving many of its primary short-term objectives. During the early months after enrollment, the employment and economic status of the experimentals in all four target groups improved substantially compared to that of the control groups. This was accompanied by significant reductions in welfare benefits. During the brief post-program period (months 16-18), however, the results are more ambiguous and vary between sites and target groups. (Evaluators caution that survey results are preliminary, limited by a small sample, and may have been influenced by rising employment opportunities nationwide and the existence of a special unemployment compensation program.) (KC)

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ED197223

MANPOWER DEMONSTRATION RESEARCH CORPORATION

THE SUPPORTED WORK DEMONSTRATION: EFFECTS DURING THE FIRST 18 MONTHS AFTER ENROLLMENT

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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This report was prepared as part of Mathematica Policy Research's contract with the Manpower Demonstration Research Corporation to carry out, with the University of Wisconsin's Institute for Research on Poverty, major aspects of an evaluation of the National Supported Work Demonstration. Rob Hollister is the Principal Investigator and Valerie Leach is the Project Director for the evaluation component of the demonstration.

Funding for this national demonstration is derived form a number of federal agencies, but comes through the Employment and Training Administration, U.S. Department of Labor under Grant No. 33-36-75-01 and Contract Nos. 30-36-75-01 and 30-34-75-02. Researchers undertaking such projects under government sponsorship are encouraged to express freely their professional judgments. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the federal government of the sponsors of the demonstration.

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PREFACE

The National Supported Work Demonstration is an experiment to test the effects of a subsidized work experience on the lives of people with long-standing employment problems. The immediate short-term goal of the program is to create -- through the provision of close and sympathetic supervision, peer group support, and gradually escalating performance standards and the production of useful goods and services -- a work environment capable of attracting and holding people who have previously been unable to secure more than occasional employment. For the longer term, this demonstration attempts to provide participants with work attitudes, habits, skills and credentials that should form the basis for their successful entry into the regular labor force. By providing an opportunity for 12 to 18 months of stable employment and income, the program also aims to reduce drug use, criminal activity and welfare dependence.

The demonstration is unusual in its scale and in the early commitment of its funders to a rigorous research design that should yield hard answers to questions about program impact and cost and should aid in the understanding of the processes of program implementation and replication. Thus, for the first time in a national employment demonstration, an experimental design using a control group methodology was built in from the beginning. For the past four years in 15 sites across the country, the demonstration has enrolled participants from four primary target groups: female long-term AFDC beneficiaries, ex-addicts, ex-offenders, and young school drop-outs, many of whom have had criminal records. In 10 of these sites, eligible program applicants were randomly assigned to either an experimental or a control group. Those assigned

to the experimental group were offered a job, and individuals in both groups were interviewed regularly at nine-month intervals, starting at their enrollment in the research sample and eventually continuing for up to 36 months.

This report, prepared by researchers at Mathematica Policy Research, the principal research contractor for the demonstration, is the third in a series of interim documents on the impact component of the evaluation. Reports have also been issued describing and analyzing the implementation of the demonstration, and a report will be forthcoming shortly summarizing early findings on supported work's benefits and costs.*

This interim document presents data from interviews with 2,830 individuals conducted at baseline, nine, and 18 months after their enrollment in the program or the control group. It presents findings on supported work's impact on earnings and employment, welfare receipt, drug use and criminal activity during a time when many of the experimentals were still in the program. It also contains early evidence on post-program impacts by analyzing separately the data for months 16 through 18, when most of the experimentals had left supported work employment. The analysis of this larger sample confirms earlier indications of the success of the program in meeting its short-term goal of creating a work atmosphere that will attract and hold these difficult-to-employ populations. However, the findings on the program's longer-term objectives are more mixed. On the whole, the results for the AFDC group remain

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* A list of Supported Work reports published by the Manpower Demonstration Research Corporation, including the Baseline and Nine-Month Analyses, is included at the end of this paper.

the most impressive, while this early analysis shows only limited sustained impacts for the other populations.

While the report contains many insights on the behavioral changes following participation in supported work, it is, for many reasons, a very preliminary document, reflecting the researchers' first effort at understanding the large body of data emerging on the demonstration. First, the analysis sample is relatively small, compared to the final sample that will be available for this demonstration, and it is also concentrated on early enrollees at certain sites. Second, as an interim document, the report of necessity focuses on gross outcome comparisons, with only limited and preliminary attention to interpretation and explanation. Thus, the authors note, the impacts of the program have varied widely over sites and populations, and they suggest that subsequent analyses may indicate further which sub-groups benefit most from participation and which program structures and treatments seem most effective. In addition, they point out that a number of specific, external developments may have depressed net program impacts: the improving labor market may, in part, account for increased earnings by the control group, and the simultaneous operation of the demonstration and a federal program extending unemployment compensation to supported work participants may have delayed their transition to unsubsidized employment. While, therefore, noting the possible importance of such factors, the authors leave the disentanglement of program and external influences for subsequent analyses.

Finally, this report follows individuals for only 18 months in contrast to the 36 months of data that ultimately will be available for a subset of the sample. This point is particularly critical since early

data on the longer time period suggest that, for some of the target populations, post-program impacts may increase over time, as the experimentals have more opportunity to locate post-program employment.

For this and for the other reasons stated above, the reader is cautioned to view the data on the early post-program period as extremely tentative, indicative more of the type of information that will be forthcoming in the final reports, than of the nature and duration of program impacts.

In addition to its contribution regarding the usefulness of supported work itself, the report will be of interest to those concerned with the effectiveness and structure of the new CETA programs emphasizing the structurally unemployed. The very features of the supported work model that distinguish it from the more familiar public service employment program -- the degree of program structure and supervision, the crew-work settings, the nature and organization of work activities -- may become increasingly a part of the CETA repertoire as that program tries to redirect its focus toward a group that may require a special work environment. Thus, the report speaks to the more general question of the role of employment strategies -- especially those of limited duration -- in dealing with the major social problems specific to the demonstration's target groups.

While this interim report is relevant to these issues, it does not address them directly. The demonstration's final reports will attempt to relate the findings on program impact and cost to the available knowledge on the success of alternative strategies for assisting these populations and to the larger policy issues.

Judith M. Gueron
Executive Vice President

SUPPORTED WORK SITES

Location	Sponsoring Agency
Atlanta	Atlanta Urban League-PREP
Chicago	Options, Inc.
Detroit	Supported Work Corporation
Hartford	The Maverick Corporation
Massachusetts	Transitional Employment Enterprises
New Jersey	
Atlantic City*	Atlantic County Vocational Services Center
Hackensack*	Bergen Supported Work Corporation
Jersey City	Community Help Corporation
Newark	Newark Service Corporation
Trenton*	Trenton Office of Employment and Training
New York City	Wildcat Service Corporation
Oakland (Alameda County)	Peralta Service Corporation
Philadelphia	Impact Services Corporation
St. Louis	St. Louis Housing Authority
San Francisco**	The San Francisco Phoenix Corporation
Washington State***	Pioneer Cooperative Affiliation
West Virginia (5 counties in Northwest area of state)	Human Resource Development Foundation
Wisconsin	
Fond du Lac & Winnebago Counties	Advocap, Inc.
Westby*	Coulee Region Community Action Agency
Whitehall*	Western Dairyland Economic Opportunity Council, Inc.
Madison*	Community Action Commission for the County of Dane and the City of Madison, Inc.
Milwaukee*	Community Relations-Social Development Commission

* New sites after fall 1978

** Participation in National Supported Work Demonstration discontinued in 1977.

*** Prior to 1979, this program was operated by Pivot.

SUMMARY

This report presents interim findings on the National Supported Work Demonstration from an ongoing evaluation conducted by researchers at Mathematica Policy Research and the Institute for Research on Poverty at the University of Wisconsin. It is based on data collected in personal interviews with 2,830 individuals -- 1,419 of whom were offered supported work jobs, and 1,411 of whom were members of a randomly-selected control group -- and provides information on the employment and earnings, welfare receipt, drug use and criminal activities of both groups during an 18-month period after their enrollment in the sample. Of the total number, 707 were in the AFDC target group, 742 in the ex-addict group, 891 in the ex-offender group and 490 in the youth group.

In interpreting these results, a number of caveats should be considered, some related to the sample itself, and others to the effects of exogenous forces on the sampled individuals and to the still preliminary stage of the analysis. First, this early sample is small (only 60 percent of those for whom there will be ultimately 18 months of data), it is concentrated in certain sites, and it is followed for only 18 months after enrollment (in contrast to the 27 or 36 months of data that will be available at the conclusion of the demonstration for a subset of the sample).

In addition, during the period under study, a temporary, special federal program, which operated from 1975 through 1978, provided supported work participants with incentives to delay their transition to regular jobs.

Thus, even though all but one of the supported work sites did not participate in state unemployment insurance programs, large numbers of individuals, upon leaving supported work, became eligible for and received Special Unemployment Assistance (SUA) benefits under this federal program. The very preliminary analysis included in this report suggests that the effects of these payments were substantial and may be an important explanation of the post-program performance of the experimental group.

Finally, the employment experiences of both the participants and controls may have been influenced by the substantial decline in the unemployment rate that occurred as the demonstration progressed.

The report suggests that supported work has succeeded in achieving many of its primary short-term objectives. During the early months after enrollment, the employment and economic status of the experimentals in all four target groups improved substantially compared to that of the control groups. This was accompanied by significant reductions in welfare benefits. During the brief post-program period (months 16 through 18), however, the results are more ambiguous and vary considerably among target groups and sites. Although it had been assumed that, over time, early experimental-control differentials in employment and earnings would decrease as controls increasingly found employment and as some experimentals failed to transition successfully from supported to unsubsidized employment, the magnitude of the decline was greater than expected for all but the AFDC group. For the other measured program impacts, the data show that supported work participation resulted in reduced criminal activities by the ex-addicts, but not by the ex-offenders and youth, and that drug use seemed unaffected. The principal findings of each of the four target groups are summarized in Table 1 and in the subsequent material.

TABLE 1
EXPERIMENTAL-CONTROL DIFFERENTIALS DURING THE 18 MONTHS FOLLOWING ENROLLMENT, BY TARGET GROUP

Outcome Measure	Target Group			
	AFDC	Ex-Addict	Ex-Offender	Youth
Average Monthly Hours Worked				
Months 1 - 9	115.2**	79.0**	73.9**	88.0**
Months 10 - 18	43.8**	17.8**	10.5**	12.3**
Months 16 - 18	17.5**	-2.4	1.1	-2.9
Average Monthly Earnings				
Months 1 - 9	$351**	$201**	$205**	$240**
Months 10 - 18	152**	55**	45**	40**
Months 16 - 18	78**	-1	29	-2
Percent Receiving Welfare[a] Income				
Months 1 - 9	-5.9**	-20.7**	-13.2**	-5.4*
Months 10 - 18	-11.4**	-6.2*	-6.4**	-1.3
Months 16 - 18	-15.0**	-5.2	-6.0**	-1.4
Average Monthly Income from Welfare[a]				
Months 1 - 9	-$110.0**	-$46.8**	-$18.5**	-$8.2*
Months 10 - 18	-81.9**	-12.8*	-13.0**	-13.1**
Months 16 - 18	-71.6**	-8.8	-15.0**	-9.0
Average Monthly Value of Food Stamp Bonuses				
Months 1 - 9	-$19.5**	-$4.3**	-$3.3*	-$0.2
Months 10 - 18	-18.2**	-2.9	-2.7	-5.7**
Months 16 - 18	-15.3**	-2.4	-1.5	-5.2**
Percentage Using Any Drug (Other than marijuana)				
Months 1 - 9	[b]	-0.1	-1.1	-1.4
Months 10 - 18	[b]	-0.7	-0.8	-1.2
Percentage With Any Arrest				
Months 1 - 18	n.a.	-11.2**	-2.2	-2.8
Percentage With Any Robbery Arrest				
Months 1 - 18	n.a.	-6.7**	0.2	-0.8

[a] Welfare includes AFDC, GA, SSI, and other unspecified cash welfare income

[b] For the AFDC sample, drug use data were not analyzed.

n.a. = Not available

* Statistically significant at the 10 percent level

** Statistically significant at the 5 percent level

- Among the AFDC target group, experimentals worked and earned significantly more than controls throughout the 18-month period. Overall, for the entire 18 months, experimentals on average worked 1,432 hours and earned $4,535 more than the controls. During the first nine months, the experimental-control differences were at their greatest: 96 percent of the experimentals had had employment versus only 32 percent of the controls; experimentals on average worked 115 hours more per month and earned $351 more than controls. By the 16- through 18-month period, the differences had decreased, although experimentals were still employed at a rate of 10 percentage points higher and worked 18 hours more per month and earned $78 more than controls.

  When only non-supported work employment is considered, the differences between experimentals and controls were also substantial. Experimentals were more likely to participate in the labor market than controls by a rate 17 percentage points higher at the eighteenth month. They also worked 28 percent of the weeks that were available for non-program jobs compared to only 21 percent for the controls. Moreover, experimentals who held non-program jobs on the average worked 10 more hours per week and earned $.72 more per hour than did employed controls.

  Largely as a result of their higher earnings, over the 18-month period, AFDC experimentals received $2,066 less in welfare benefits and food stamp bonuses than did the controls. Over the first nine-month period, they received an average of $130 less per month, which declined to an $87 per month difference by months 16-18. This is reflected in not only their receipt of smaller average benefits but also in a persistent movement off welfare by the experimentals: by months 16-18, twice as many experimentals as controls had left the rolls, with only 70 percent receiving some benefits compared to 85 percent of the controls.

- Among the ex-addicts, the experimentals worked and earned significantly more than the controls during the first nine months and continuing on through month 15. For the entire 18-month period, the experimentals worked 873 hours and earned $2,307 more than the controls. During the first nine months, the experimental-control differences were large, with the former working 79 hours and earning $201 per month more than the latter. However, by months 16-18, no significant differences were observed overall, although relatively large, positive differences did persist in several of the sites (Chicago and Oakland), which were offset by negative differentials in another site (Jersey City).

  The employment effects led to a reduction in welfare income and food stamp bonuses, totaling $601 over the 18-month period and averaging $51 per month in the first nine months. The experimental-control difference declined to an insignificant amount by months 16-18.

The most interesting results for the ex-addict group, however, were in the observed difference in criminal activities: a significantly lower percentage of experimentals (25 percent) than controls (36 percent) reported having been arrested during the 18-month period. (Substantial variations were observed across sites and subgroups, with notably large reductions in Oakland and for ex-addicts over 35 years old.) The principal source of the reduction was a decrease in the percentage of experimentals arrested for robbery or for drug-related offenses (for robbery arrests, 2.1 percent of the experimentals compared to 8.8 percent of the controls; for drug arrests, 3.6 percent of the experimentals compared to 8.8. percent of the controls). This reduction in arrests was accompanied by significantly fewer convictions and less incarceration.

Overall, the data on drug use suggest no significant program effects. However, there were significant reductions in heroin use for ex-addicts over 35 years old and for those in the Oakland program.

- For the ex-offender group, the results were not particularly impressive. During the first nine months, experimentals worked 74 hours more per month and earned $205 more than controls. However, by month 12, the experimental-control differences were no longer statistically significant. During the full 18 months, ex-offender experimentals experienced the smallest gains in comparison to their control-group counterparts of all four target groups in terms of hours worked and dollars earned: 765 hours and $2,250. This is partly because they left the demonstration, on average, sooner: 6.2 months after enrollment compared to 9.7 for AFDC, 7.3 for ex-addicts, and 6.9 for youth.

  However, in contrast to the ex-addicts, significant reductions in welfare benefits continued into the 16-18-month period: experimentals received an average of $22 per month less than controls in welfare income and food stamp bonuses over the first nine months, and an average of $17 less during months 16-18, for a total savings of $338 over the 18-month period.

  Finally, there is no evidence that the program had an impact on criminal activities or drug use.

- Among the youth group, experimentals worked and earned significantly more than controls during the first nine months and continuing through month 12. Overall, experimental-control differences in hours worked and dollars earned during the 18-month period averaged 903 and $2,520, respectively.

  For the first nine months, experimentals worked 88 hours and earned $240 per month more than controls, with larger differences in some sites (Atlanta and Jersey City). Overall, there were no significant,

employment-related differences in months 16-18, although such impacts persisted for experimentals in Atlanta.

Welfare income and food stamp bonuses also were slightly lower for experimental youth relative to controls during the first nine months, although these differences did not persist into months 16-18. For the full 18-month period, the difference in welfare and food stamp benefits paid to experimentals and controls was only $245, the smallest of all the target groups.

As with the ex-offender group, supported work did not appear to have any significant effects on drug use or criminal activities, apart from a reported increase in marijuana use by experimentals.

Manpower Demonstration Research Corporation

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CHAPTER I

INTRODUCTION

Supported Work is a special work experience program designed to help groups of people with well established employment difficulties to get and keep a regular job. In addition to this major goal, other important objectives include reduction in such forms of behavior as welfare dependence, drug use, and criminal activity.

The national Supported Work demonstration, currently under way in 14 sites across the country, is designed to assess the effectiveness of Supported Work in achieving these objectives. The four target groups that provide the focus for the demonstration are women who have been receiving welfare payments under the Aid to Families with Dependent Children (AFDC) program for substantial periods of time; ex-addicts who have recently been in drug treatment programs; ex-offenders who have recently been released from prison or jail; and young school dropouts, many of whom have records of delinquency.

Supported Work is specifically designed to be a temporary program. It provides individuals with employment for a limited time, after which they must leave, whether or not they have found jobs elsewhere. While they are in the program, participants earn relatively low wages, but are given some opportunity to increase their earnings through bonuses and promotions for good performance and attendance. Support is provided through work assignments in crews of peers, and also through close supervision by technically qualified people who understand the work histories and personal backgrounds

of their crew members and who will enforce gradually increased standards of attendance and performance until they resemble those of regular jobs.

To help answer a number of questions about the effectiveness of Supported Work, a special evaluation component to measure participant outcomes has been built into the demonstration. Thus, in 10 sites, a sample of eligible applicants for Supported Work has been randomly assigned either to an "experimental" group (in which case they were offered the opportunity to get a Supported Work job) or to a control group (in which case they were not). All those who went through this random assignment process were scheduled to be interviewed, initially at the time the assignment took place and subsequently at 9-month intervals for up to three years.

This paper discusses an interim analysis of the effects of Supported Work based on data for those persons in this evaluation sample who have already completed a baseline, a 9-month, and an 18-month interview. (The 9-month and 18-month interviews both ask questions, month by month, about the preceding 9-month period.) Table I.1 gives the total sample size and the sizes of the various subsamples. As can be seen, all four target groups are represented, as are all 10 of the demonstration sites in which random assignment to Supported Work or to the control group took place. The total sample size for this analysis is 2,830, of which 25 percent are from the AFDC target group, just over 25 percent are ex-addicts, about 30 percent are ex-offenders, and 17 percent are youths. Of the ten sites in the sample, Jersey City has the largest representation--20 percent of the total. Chicago, Philadelphia, Hartford, and Newark have more than 300 people in the sample; Wisconsin, with only 26, and Atlanta, with 97, have the

TABLE I.1

SAMPLE ALLOCATION, BY SITE AND TARGET GROUP

	Target Group				Total	
	AFDC	Ex-Addict	Ex-Offender	Youth	Number	Percent
Site						
Atlanta	80	n.a.	n.a.	17	97	3.4
Chicago	138	163	128	n.a.	429	15.2
Hartford	50	n.a.	117	220	387	13.7
Jersey City	n.a.	286	119	156	561	19.8
Newark	171	n.a.	147	n.a.	318	11.2
New York	205	n.a.	n.a.	35	240	8.5
Oakland	37	43	147	n.a.	227	8.0
Philadelphia	n.a.	250	112	62	424	15.0
San Francisco	n.a.	n.a.	121	n.a.	121	4.3
Wisconsin	26	n.a.	n.a.	n.a.	26	0.9
Total	707	742	891	490	2,830	100.0
Percent of Total	25.0	26.2	31.5	17.3	100.0	

n.a. = not applicable.

smallest representation. Half of the total sample had been assigned randomly to the experimental group, and half to the control group.

Members of this sample were all enrolled between April 1975 and February 1977; they all completed baseline interviews at the time of their enrollment, and follow-up interviews nine and eighteen months later. This sample includes only 60 percent of those who should, in principle, have completed all three interviews. Of the full sample, 98 percent responded to the baseline interview, 80 percent to the 9-month interview, and 69 percent to the 18-month interview. Evidence presented in Appendix A indicates, however, that non-response to interviews has not generally led to biased results.

The sample analyzed here includes about 60 percent of all of the 18-month interviews that we expect ultimately to be available. Compared with the full research sample of over 6,500 who were enrolled up through July 1977,[1/] this sample contains relatively more people from Jersey City, Philadelphia, and Chicago, and fewer from Atlanta, Hartford, New York, and Oakland. Youths from Atlanta and New York and women from the AFDC target group in Oakland are particularly underrepresented in this sample. Readers should keep in mind as they examine the results of this analysis not only the composition of this early sample and its differences from the full research sample, but also the fact that these results are preliminary and cover only the very early post-program period.

Using data for this sample, we have estimated the effects of Supported Work along various dimensions by comparing values for the experimentals and the controls. Most of the estimated experimental-

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[1/] For a description of the full evaluation sample, see Jackson et al. (1978).

control differentials reported in subsequent chapters are based on multiple regression analysis, which permits us to abstract from any influence on the results that might come from the individual's site or various pre-enrollment characteristics. Because the individuals in the sample were randomly assigned to the experimental and control groups, there will be no systematic bias in the estimates of the true effects. They are, however, subject to sampling variability--meaning that if we were to estimate the same differences using another sample of experimentals and controls drawn from the same overall population, we would be likely to obtain somewhat different estimates.[1/] For this reason, we present indicators (asterisks) in the tables to signal whether the results are statistically significant at various levels of confidence.[2/]

As already mentioned, this is an interim report covering those months in which participants could be employed in Supported Work and, for some, their first few post-program months. As such, it is one of a series of reports that documents the evaluation of the national Supported Work demonstration. The full evaluation will, in due course, make use of information collected over longer periods of time that will include many more months of post-program experience. The results of the analysis reported here, therefore, should be considered only as indications of the short-run effects of Supported Work.

[1/] The use of regression analysis reduces the variability in the estimates due to sampling, and thereby provides more precise estimates of program effects.

[2/] See Masters et al. (1977) for a more detailed discussion of confidence intervals and statistical significance.

In Chapter II, we describe briefly the program eligibility criteria, the mechanisms through which individuals were referred to Supported Work, the background characteristics of the sample, and hypotheses concerning the effects Supported Work would have on participants' behavior. Chapters III, IV, V, and VI contain detailed results for the four target groups--AFDC, ex-addicts, ex-offenders, and youth, respectively. Within the constraints of the material, these chapters all follow the same format. Chapter VII summarizes the results in each of the various outcome areas and presents some concluding comments. Appendix A investigates the effects of interview non-response on the results presented in the body of the report. Appendix B describes the field results for the 18-month interviews and compares the characteristics of respondents and nonrespondents to this interview. Appendix C contains the means and standard deviations of the control variables used in the regression analyses.

CHAPTER II

THE SAMPLE, THE SUPPORTED WORK EXPERIENCE, AND RESEARCH HYPOTHESES

A. THE SAMPLE

A set of eligibility criteria was established at the outset of the Supported Work demonstration to identify those persons most likely to benefit from Supported Work. These criteria, which are summarized in Table II.1, required not only that all enrollees be members of one of the four target groups for the demonstration, but that they also be currently unemployed and have demonstrated a history of employment problems. A primary goal of these criteria was to exclude those who, although nominally in one of the target groups, might well be able to function quite adequately in the labor market.

Most individuals who ultimately were included in the experimental or control group samples were referred to the program by an official agency. The majority of the AFDC group were WIN registrants and were referred by that program. Ex-addicts tended to be referred by their treatment programs. Most ex-offenders were referred by criminal justice agencies, although many of them applied by personally walking into the site offices. Youth were referred by a variety of sources, including criminal justice and drug treatment service agencies and the Employment Service.

According to interview data, about 20 percent of those who applied to Supported Work and were randomly assigned to either the experimental or control groups failed to meet one or more of the

TABLE II.1

SUMMARY OF SUPPORTED WORK ELIGIBILITY CRITERIA

Criteria	Target Group[a]			
	AFDC	Ex-Addict	Ex-Offender	Youth
Employment History	Spent no more than three months in one regular job during the last six months[b]			
Current Employment	Currently unemployed[c]			
Age	No condition	18 or over		17 to 20
Incarceration	No condition		Incarcerated within last six months as a result of a conviction[d]	No condition[e]
Drug Treatment	No condition	In drug treatment program currently or within the past six months	No condition	
Education	No condition			Not completed high school or high school equivalency
School Status	No condition			Not in school within past six months
Welfare Status	Continuously on welfare during past three years	No condition		
Ages of Children	Youngest child is six or older	No condition		

NOTE: Supported Work eligibility criteria refer to conditions prevailing at the time of application to the Supported Work program. If a person in Supported Work voluntarily or involuntarily leaves the program and subsequently reapplies for a Supported Work job, he/she is not reviewed again for acceptance under the eligibility criteria.

[a] Individuals eligible for more than one target group are assigned to the target group corresponding to their referral sources. If there is no target-group-specific referral source, they are screened for eligibility and assigned to the first of the following for which they are eligible: ex-addict, ex-offender, youth, AFDC.

[b] "One regular job" is defined as one job of 20 or more hours per week.

[c] Employment is defined as having worked an average of more than 10 hours a week over the last four weeks.

[d] Alternatively, an individual must have been incarcerated within the past six months, must have served at least 120 days pretrial, and ultimately must have been convicted.

[e] At least 50 percent of the youth must have a delinquency record, a conviction, a court appearance, or similar contact with the criminal justice system.

[f] "On Welfare" is defined as (1) receiving welfare currently and 36 months ago and (2) receiving benefits for 30 of the past 36 months.

eligibility criteria for their target group.[1] However, 95 percent of the sample either met these formal eligibility criteria or possessed characteristics that met a set of alternative, less strict criteria that indicate extensive histories of unemployment and other attributes that militate against successful participation in the regular labor market: extended periods of welfare receipt, a history of drug use, incarceration, or youthfulness.[2]

Some general characteristics of the sample used for this interim report are presented in Table II.2. Except for the AFDC target group, which is all female, most sample members are male. Their average age ranges from 18 for the youth target group to 34 for the AFDC group. Over 85 percent of the sample are black or Hispanic, and few have completed high school. On average, these individuals were employed only four to ten weeks during the year prior to their enrollment in the demonstration. These factors, together with the long-term welfare dependence of the AFDC group, the drug use and extensive criminal histories of the ex-addict group, and the recent incarceration and extensive criminal histories of the ex-offender group, mean that some special transitional employment experience might be necessary for these target group members to succeed in the regular labor market.

We should note that, although the target group samples analyzed here have characteristics similar to those of the full research samples, they are not representative of the larger groups from which the target-

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[1] The non-eligibles have been retained in the sample, however, and we continually compare their responses to Supported Work with those who are appropriately eligible. The analysis so far has shown few significant differences between the two groups.

[2] See Jackson et al. (1978).

TABLE II.2

CHARACTERISTICS OF THE SAMPLE AT ENROLLMENT, BY TARGET GROUP

	Target Group			
	AFDC	Ex-Addict	Ex-Offender	Youth
Percentage Male	0.0	80.9	94.7	88.6
Average Age	34.4	27.8	25.4	18.3
Race/Ethnicity				
Percentage black, non-Hispanic	83.3	78.4	84.1	76.5
Percentage Hispanic	10.2	7.1	8.7	13.9
Percentage white, non-Hispanic	6.5	14.5	7.2	7.4
Percentage with 12 or More Years of Education	30.3	27.0	25.2	0.8
Percentage Currently Married	3.1	23.5	12.9	4.5
Average Number of Dependents in Household	2.2	0.9	0.4	0.1
Percentage Who Ever Held a Job	83.6	95.3	87.8	76.8
Average Number of Weeks Worked during Previous 12 Months	3.5	10.4	5.6	9.7
Average Earnings during Previous 12 Months (dollars)	220	1,228	564	799
Average Number of Years Received Welfare	8.6	n.a.	n.a.	n.a.
Percentage Who Received Welfare during Previous Month	99.9	41.3	20.0	10.9
Percentage Living in Public Housing	38.5	16.1	21.6	26.7
Percentage Ever Used Drugs Regularly (other than marijuana)	n.a.	90.3	38.6	5.9
Percentage Ever Used Heroin Regularly	n.a.	87.0	33.1	3.8
Percentage in Drug Treatment during Previous Six Months	n.a.	90.9	11.2	1.9
Average Number of Arrests	n.a.	8.1	8.9	2.5
Average Number of Convictions	n.a.	2.8	3.0	0.7
Percentage Incarcerated during Previous 12 Months	n.a.	27.4	91.5	20.7
Number in Sample	707	742	891	490

NOTE: These data were obtained through interviews administered to experimental and control group members at about the time the experimentals were enrolled in the demonstration.

n.a. = data not available or not analyzed.

group samples were drawn. For example, this AFDC sample is older, on average, than either the general AFDC population or WIN participants,[1] and it excludes those AFDC women with children younger than six. Over half of the national population of addicts in treatment have completed 12 or more years of schooling (U.S. Department of Health, Education, and Welfare, 1977), compared with only 27 percent of this sample. The most striking differences between the ex-offender sample and the larger group from which it was drawn is that Supported Work enrollees are relatively young: less than 10 percent of this sample is older than 35, compared with over 25 percent of the national ex-offender population (U.S. Department of Justice, 1976). Finally, the Supported Work youth were employed considerably fewer weeks during the year prior to their enrollment (10 weeks) than is typical of the population of young school dropouts (17 or fewer weeks).[2] Because of these differences, the findings discussed in the subsequent chapters cannot be generalized to these larger populations.

B. THE SUPPORTED WORK EXPERIENCE

1. Types of Jobs

The types of jobs held by supported workers vary considerably across target groups, among sites, and over time. The AFDC group has worked predominantly in service industries, primarily in clerical jobs or as teachers' or health aides. Most of the ex-addicts and ex-offenders

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[1] Thirty-one percent of all AFDC recipients (1975 AFDC Survey) and 44 percent of the WIN participants (Schiller et al., 1976) are younger than 25, compared with less than 15 percent of this sample.

[2] This latter figure is a lower bound estimate, based on data reported to U.S. Bureau of the Census (1978). It assumes that all 16- to 21-year-olds who completed high school worked 52 weeks per year.

and a large proportion of the youth have worked in construction jobs: painting, building rehabilitation, and cleaning and sealing unoccupied houses. Jobs in the service industries (building maintenance and miscellaneous business services were most common) also were held by many members of these three target groups.[1/]

2. Wage Rates

Wage rate guidelines in Supported Work provided that starting wages be based on, but be below, the wage that participants might be expected to receive in a regular job (the reference wage rate), and that longevity increases be allowed. The relevant reference wage rates were calculated from poverty-area wage rates taken from the 1970 Census and from Bureau of Labor Statistics data on wage-rate changes over time in the various cities or regions. In sites with no adult target group except AFDC, data about wages of women in those areas were used; in other sites, all target groups received wages calculated from prevailing wages for men.[2/] Starting wage rates were set at 78 percent of the reference wage rate (plus or minus 10 cents), but never less than the federal minimum wage. At the start of the program, longevity increases in wages were such that by the end of one year's participation in the program the participant's program wage was close to the reference wage.[3/] However, because site-specific wage increases at several points during the demonstration did not reflect changes in the reference wage, as time

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[1/] MDRC (1976 and 1978) describes the variety of supported workers' jobs in more detail.

[2/] Hollister et al. (1975) document this estimation procedure.

[3/] Longevity wage-rate increases occurred typically after two, four, and eight or nine months of participation.

went on there was considerable variation in the program wage rates relative to the reference wage rates. For example, in June 1978 starting wages ranged from about $2.65 per hour in Atlanta, New York, Oakland, and Wisconsin to $3.00 in Philadelphia, and wages of those who had been in Supported Work for 12 months ranged from $3.38 per hour in Philadelphia to $3.00 per hour in New York and Wisconsin.[1/]

3. Mandatory Graduation

Because the purpose of the program is to provide only transitional support, participants are required to leave Supported Work after a fixed period. Sites were therefore required to adopt either a 12-month or an 18-month mandatory graduation rule. Of the 10 sites included in this portion of the evaluation, Atlanta, Chicago, Jersey City, Oakland, and San Francisco are 12-month sites; Hartford, Newark, Philadelphia, and Wisconsin are 18-month sites; in New York, the AFDC target group may stay for up to 12 months, and youths may stay for up to 18 months.

There have been two exceptions to the mandatory maximum length of stay: participants in 12-month sites who enrolled before January 1, 1976 could be permitted to stay in the program for 15 months; and participants in all sites could be allowed to participate in Supported Work, at the discretion of the site director, up to three months beyond 12 or 18 calendar months from enrollment in order to compensate for any inactive time during their period of participation.

Despite these formal distinctions in the sites' mandatory graduation policies, program operators in all sites aimed to move

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[1/] These wage rate data are based on information provided by the Manpower Demonstration Research Corporation.

individuals out of Supported Work at the end of 12 months. As a result, there is little actual difference between the 12- and 18-month sites in the average length of program participation.

4. Ancillary Services

In addition to providing work for their participants, Supported Work sites are permitted to assign up to 25 percent of participants' time to such activities as training, counseling, and job-search aid. However, actual use of these ancillary services was very limited, and much less than the amount contractually permitted.

C. HYPOTHESES CONCERNING PROGRAM EFFECTS

Supported Work is designed to be a transitional employment program. Thus, the focus of this component of the evaluation is on employment-related outcomes. There are also other potentially important program effects that should be considered. We discuss briefly in this section the main hypotheses that will be addressed in this and subsequent reports.

1. Employment and Earnings

The primary hypothesis concerning employment and earnings effects is that

> both during and after participation in Supported Work, experimentals will have more stable employment, work more hours, and earn more than their control group counterparts.

During the initial months after enrollment, these effects are expected to result primarily from experimentals' Supported Work ("program") jobs. Subsequently, the experimentals might be expected to have more successful experiences in the regular labor markets (including higher wage rates)

because their experiences in Supported Work enable them to work more effectively, possibly with new skills, and because their Supported Work jobs provide a record of steady employment that renders them less of a risk in the eyes of potential employers. In addition, any placement efforts on their behalf by the Supported Work programs would tend to enhance their future employment opportunities.

As experimentals leave Supported Work, the employment and earnings differences between them and controls can be expected to narrow, as some experimentals will probably not be successful in making the transition to the regular labor market. This might be most true among the youth group, since some analysts have argued that the main cause of youth employment difficulties is their lack of motivation to work regularly--that, since most live with their parents and have no dependents, their motivation is simply to earn "pocket money" (Osterman, 1978; Levitan and Belous, 1977).

2. Receipt of Welfare Income

The primary hypothesis with respect to receipt of welfare benefits by participants or other members of their household is that

> experimentals will be less likely than controls to receive welfare income, and receipt will decline among those experimentals who continue to receive benefits.

This particular outcome may occur during program participation, if only because these kinds of income are usually work-conditioned and Supported Work jobs would, by definition, reduce the amounts for which experimentals are eligible. Welfare income would decline after program participation to the extent that the program increased employability and instilled

better work habits, thus enabling former participants to be more economically self-sufficient.

3. Education and Training

The effects of Supported Work on education and training decisions, while of interest for all target groups, are of particular interest for the youth group since, by design, all youths were school dropouts at the time they enrolled in the demonstration.[1/] However, there are contrasting hypotheses concerning such effects. On the one hand, one may hypothesize that

> experimentals, as compared with controls, will make more investment in education and training, either during or after their participation in Supported Work, to supplement their work experience in the program.

On the other hand, Supported Work may sufficiently increase employment opportunities for experimentals, both during and after Supported Work, so that

> experimentals will consume less education and training than controls because of their higher opportunity costs.

Other factors that may differentially influence such investment decisions of the two groups are information about, and direct opportunities to participate in, education and training programs and the cost of enrolling in such programs.

[1/] Each year, approximately 100,000 youths drop out of school and become unemployed (Jackson et al., 1978). Many more drop out of school and do not enter the labor force.

4. Drug Use

The central hypotheses concerning the effects of Supported Work on the use of drugs are that

> employment in the supportive, Supported Work environment will reduce the likelihood and/or the extent of drug use by ex-addicts and others with a history of drug use,

and that

> the Supported Work experience will increase the likelihood that those without prior drug use experience, particularly youths, will avoid the drug culture and pursue a more socially acceptable life style.

The failure of these effects to appear might result from a number of factors; for example, the higher incomes resulting from Supported Work jobs provide the means for increased consumption of drugs among some experimental group members (Hannan, 1975). Also, among those with no prior drug-use experience, close association with ex-addicts through Supported Work employment could lead to drug use. Such an effect could offset, at least partially, any program-induced reductions in initial use rates.

5. Criminal Activity

The primary hypothesis related to the effect of Supported Work on criminal activity is that

> experimentals will engage in less criminal activity than controls, both during and after participation in Supported Work.

A reduction in criminal activities could occur for a number of reasons. First, and most important, Supported Work might reduce the likelihood of recidivism by providing a legitimate means for ex-offenders to obtain

income. This suggests that economic crimes, especially, might decrease among the experimental group. Second, Supported Work might reduce participants' tendencies to commit crime by increasing the cost of deviant behavior. These increased costs would result from the loss, through arrest and incarceration, of the economic and social gains that resulted from program participation. Third, Supported Work might lead individuals to improve their perceptions of their own worth and their attitudes concerning legitimate work to the extent that the probability of future criminal activity would decline.

6. Summary

These and related hypotheses are addressed in subsequent chapters. However, we should at the outset remind the reader of a number of limitations of this analysis.

First, this analysis includes only about two-thirds of the sample for whom we ultimately will have 18 months of follow-up data. More important, the follow-up period studied here is only the first 18 months after enrollment in the demonstration.

In addition, the data used in this analysis were collected through interviews and are thus subject to response error. However, review of other data on the validity of self-reported earnings and some preliminary work by us to validate both the welfare and crime data through the use of official records information suggest that, although some under-reporting exists, the magnitude is not large and the experimental-control group differences in response error are either small or nonexistent.[1/] Although it has not been possible to validate the self-reported data on drug use,

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[1/] These comparisons are described in Maynard et al. (1977), and Schore et al. (1978).

some effort has been made to assess its quality: it is likely that drug use is under-reported, but there is no evidence of differential under-reporting by experimentals and controls (Dickinson and Behrens, 1978). Furthermore, much of the decline in reported drug use between the 9-month and 18-month interviews has been identified as being a secular decline in use, concurrent with a national decline (Dupont, 1977).

Finally, the generalizability of the findings is limited by the analysis including only 10 sites and covering a limited period of time during which labor-market conditions were changing. At the time that the first sample member was enrolled in the demonstration, unemployment rates in the 10 research sites ranged from 7.2 percent in Chicago to 14.9 percent in Jersey City; by July 1978, unemployment had dropped considerably, ranging from 3.8 percent in Hartford to 11.8 percent in Jersey City (U.S. Department of Labor 1975 and 1978).

A confounding influence was the Special Unemployment Assistance (SUA) program, which began in January 1975 and terminated for new claims on December 31, 1977, and for all claims on July 1, 1978. With the exception of the New York program, which was required to participate by law, the demonstration sites purposely did not participate in the state unemployment insurance programs. Nonetheless, because of the availability of SUA, large portions of experimental group members in some sites reported receiving unemployment compensation benefits after leaving Supported Work. As a result of this alternative income source, the incentive of these individuals to find employment was reduced. The resulting experimental-control group differences are therefore smaller than those we would expect to observe under similar labor-market conditions in the absence of the SUA program.

It also should be noted that during the later months covered by this particular analysis there was an expansion of CETA funding, especially for youth employment. This increased the employment options of the control group and, depending on the enforcement of time limits for participation in CETA-funded slots, may decrease the post-Supported-Work employment options of experimentals.

These caveats should be borne in mind when assessing the results presented in the next four chapters. The final report on this component of the Supported Work evaluation will address some of these issues more fully, but others will simply remain limitations to be dealt with judgmentally.

CHAPTER III

FINDINGS FOR THE AFDC SAMPLE

The national Supported Work demonstration sought to enroll in the AFDC sample a group of women thought to be most likely to benefit from the structure of Supported Work: those who had received welfare payments for a long time, those who had been out of the labor market for a considerable period of time, and those who were likely to lose their AFDC eligibility within a few years when their children reached maturity.

In this chapter we present estimates, based on a sample of 362 experimentals and 345 controls, of the program's impact for a group of AFDC beneficiaries during the first eighteen months following their enrollment in the demonstration.[1/]

In assessing these findings it is important to remember that all of the experimentals in the AFDC target group potentially could have participated in Supported Work during the first twelve months covered by this analysis, and that 36 percent of them were enrolled in programs where operators could, at their discretion, permit individuals to participate in the program for up to 18 months. In fact, many reported having left the program before their mandatory graduation date, the average length of stay being 9.4 months. Just over 50 percent reported staying

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[1/] Reported drug use among the AFDC target group was very low, as one would expect given that less than 2 percent of the AFDC population are reported to have drug abuse problems (primary analysis of the 1975 AFDC Survey data). Thus, we have not analyzed drug use data for this sample. Furthermore, AFDC women were not asked about any involvement in crime.

in Supported Work for as long as 12 months and only 3 percent stayed the full 18 months (see Table III.1). When asked in their interviews why they left Supported Work, over 70 percent of participants reported having left the program for neutral reasons (such as the expiration of program eligibility or child care problems); 16 percent reported having left for "positive" reasons (to a job or to enroll in an education or training program); only 12 percent said they left for "negative" reasons (i.e., terminated for performance).[1/]

A. EMPLOYMENT

1. Overall Experimental-Control Differences

As Table III.2 shows, the central Supported Work goal of increased employment is at least partially fulfilled. During the first three months after enrollment, 95 percent of the experimental group were employed, compared with only 20 percent of the control group.[2/] Although a significant difference in employment rates persisted throughout the full 18-month period, the difference declined over time until, by the 16-to-18-month

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[1/] The Supported Work Management Information System data indicate that, of those AFDC women in all sites who left Supported Work, 31 percent left for positive reasons, 25 percent for negative reasons, and 44 percent for neutral reasons (MDRC, 1978). Discrepancies between the MIS and interview data may be due to the differences in the time period covered and the sample considered, as well as unavoidable differences in the actual definition of these categories.

[2/] Seven percent of the experimental group did not show up for work after being enrolled in the sample. Among the "no shows," less than 20 percent said that child care or the kind of work was the reason they did not accept the job, and less than 10 percent had a better job. None reported that the pay, the staff, a desire to attend school, or not wanting to work was the reason they failed to accept the program job.

TABLE III.1

LENGTH OF PARTICIPATION IN SUPPORTED WORK AND REASONS FOR DEPARTURE, AFDC SAMPLE

	Sites with Mandatory Graduation After 12 Months of Participation[a]	Sites with Mandatory Graduation After 18 Months of Participation[b]	Total
Percentage Still in Program at the End of Month			
Three	87.9	87.0	87.6
Six	75.2	76.4	75.6
Nine	65.6	66.1	65.8
Twelve	54.0	47.2	51.7
Fifteen	4.2	17.9	8.8
Eighteen	2.1	3.0	2.5
Average Number of Months in the Program	9.3	9.5	9.4
Percentage Who Left Supported Work:			
To take another job or to enroll in school or job training	11.3	15.0	16.1
For reasons related to poor performance	15.3	15.0	11.5
For other Reasons	73.4	70.0	72.4

[a] Atlanta, Chicago, New York, and Oakland. No individuals in these sites should have been in Supported Work during the 16-to-18-month period. That some report such enrollment may be due to reporting error or to Supported Work's occasional failure to terminate those whose elibibility has expired.

[b] Hartford, Newark, and Wisconsin.

TABLE III.2

PERCENTAGE EMPLOYED IN ANY MONTH, EXPERIMENTALS AND CONTROLS,

AFDC SAMPLE

	Experimentals	Controls	Differential	Percentage of Experimentals With Only Supported Work Jobs
Months 1-3	94.9	20.4	74.5**	92.8
Months 4-6	89.4	22.4	67.0**	86.1
Months 7-9	81.9	23.2	58.7**	75.9
Months 10-12	72.6	25.1	47.5**	61.6
Months 13-15	56.7	29.6	27.1**	36.5
Months 16-18	40.7	30.3	10.4**	6.6

NOTE: The data on the percentages employed are regression adjusted estimates that control for differences in employment due to age, sex, race, education, prior work and job training experience, household composition, site, and length of site operation. These estimates were calculated using ordinary least square (OLS) techniques. Although probit is a more appropriate estimation technique when the dependent variable takes only two values, results evaluated at tne mean have been shown, in general, to be quite similar for the two estimation procedures. We chose to use OLS techniques since we planned to evaluate the experimental-control group differences at the mean values of the independent variable and because this information is more readily available from the standard output from OLS regression packages.

**Statistically significant at the 5 percent level on a two-tailed test.

period, 41 percent of the experimentals and 30 percent of controls were employed. Only 7 percent of the total experimental group had Supported Work jobs and no other employment during this last 3-month period, however, so the experimental-control difference is not due simply to Supported Work jobs.

In part as a result of these differential employment rates, we also observe significant differences between experimentals and controls in the number of hours they worked. As shown in Table III.3 and Figure III.1, at the beginning of their Supported Work experience experimentals worked, on average, about 143 hours per month compared with the controls' average of only 18 hours per month. Restricting the comparison to those who did some work, we observe that during these first three months experimentals who worked were at work about 150 hours per month, and controls who worked were at work about 90 hours per month--which indicates that Supported Work provided a more consistent pattern of employment for experimentals than did the alternatives available to controls. By the 16-to-18-month period, however, the employment of experimentals had dropped considerably--to an average of only 55 hours per month (135 hours among those employed)--while the control group's hours had increased--to 37 hours per month (123 hours among those employed). This drop in hours of work among the experimental group is due almost entirely to the decline in their Supported Work employment: their program hours fell from 139 to 7 hours per month over this 18-month period. The increase among controls probably is due to a combination of their continued job search and improving economic conditions.

TABLE III.3

AVERAGE HOURS WORKED PER MONTH, EXPERIMENTALS AND CONTROLS,

AFDC SAMPLE

	Experimentals	Controls	Experimental-Control Differential	Program Hours of Experimentals	
				Number	Percent of Total Hours
Months 1-3	142.7	17.9	124.8**	139	97
Months 4-6	141.1	25.7	115.4**	135	96
Months 7-9	130.4	24.9	105.5**	119	91
Months 10-12	113.2	29.3	83.9**	95	84
Months 13-15	65.5	35.4	30.1**	28	43
Months 16-18	54.8	37.3	17.5**	7	13

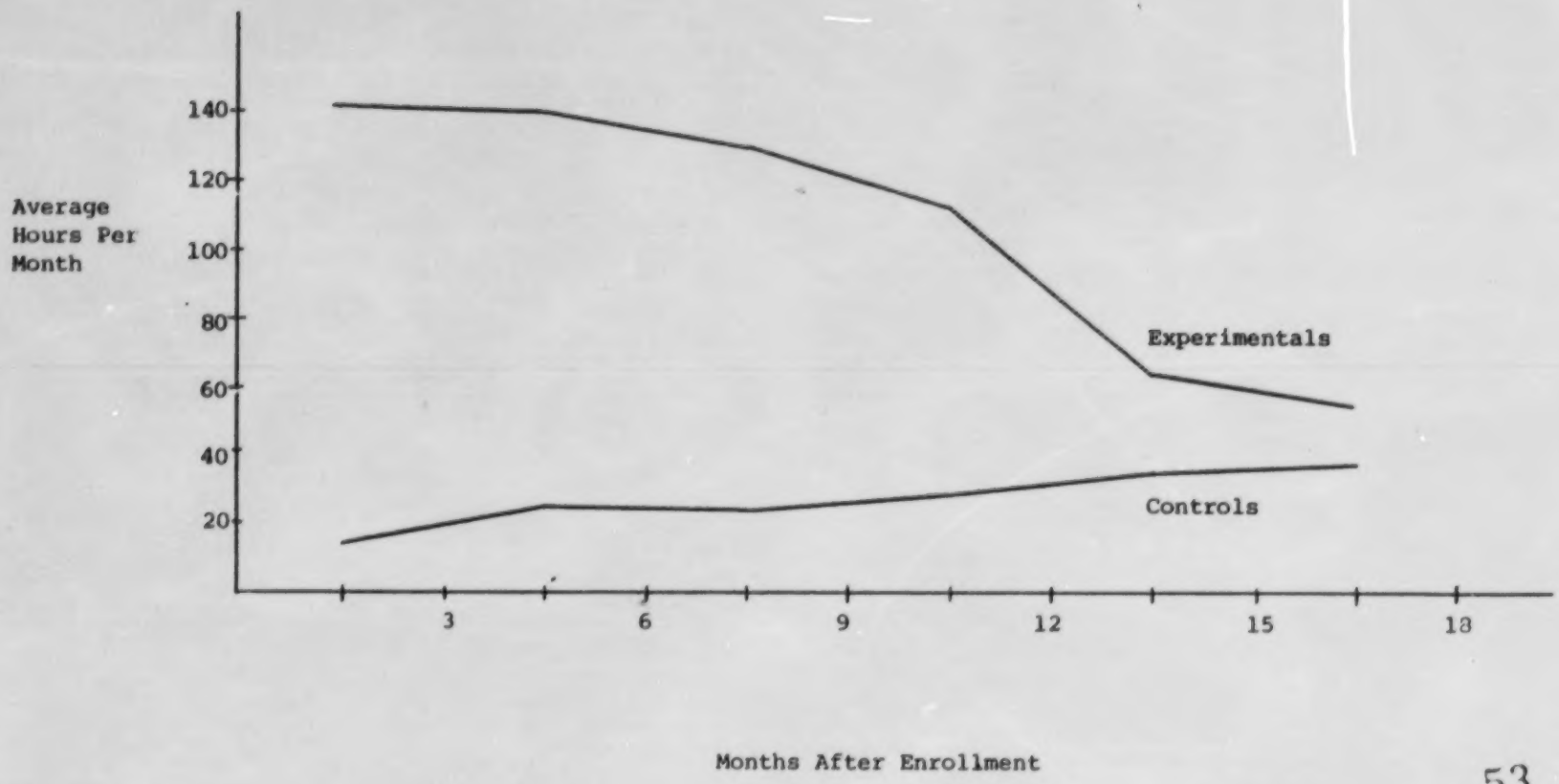
NOTE: The data on hours worked in all jobs, presented in the first three columns, are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, and length of site operation.

**Statistically significant at the 5 percent level on a two-tailed test.

FIGURE III.1

AVERAGE HOURS WORKED PER MONTH, EXPERIMENTALS AND CONTROLS,

AFDC SAMPLE



NOTE: All of the experimental-control differences are statistically significant at the 5 percent level.

Although the employment differential between experimentals and controls narrowed considerably as experimentals left the program, the characteristics of experimentals' jobs improved over time and remained favorable relative to those of controls. During the first three months, for example, those working in the experimental and control groups earned average wage rates of $2.95 and $2.49, respectively; by the 16-to-18-month period, experimentals earned an average of $3.65 per hour ($3.73 on non-Supported-Work jobs), while controls earned $3.28 per hour.[1/]

A combination of the employment rate, hours, and wage rate differences between experimentals and controls resulted in the earnings differences presented in Table III.4. For the first three months after enrollment, experimentals earned an average of $376 per month more than controls. Forty-two percent of this difference is due to the employment rate differences; 11 percent is due to a 46 cent per hour wage rate differential; and 47 percent results from experimentals who were employed having worked about 60 hours more per month than their control group counterparts. By the 16-to-18-month period, the earnings difference had dropped to $78 per month--a result both of a decline in program earnings among experimentals that was only partially compensated for by an increase in nonprogram earnings and of a considerable rise in earnings of the control group. By this time over half of the earnings difference was the result of higher wage rates of experimentals.

[1/] Average hourly wage rates earned by experimentals and controls (weighted by the number of hours an individual worked) can be calculated by dividing the average monthly earnings data presented in Table III.4 by the average monthly hours worked presented in Table III.3.

TABLE III.4

AVERAGE EARNINGS PER MONTH, EXPERIMENTALS AND CONTROLS,

AFDC SAMPLE

	Experimentals	Controls	Experimental-Control Differential	Program Earnings of Experimentals
Months 1-3	$420.5	$44.5	$376.0**	$409.8
Months 4-6	417.8	66.6	351.2**	397.2
Months 7-9	392.0	64.9	327.1**	356.0
Months 10-12	359.3	92.1	267.2**	285.5
Months 13-15	227.2	114.9	112.3**	83.8
Months 16-18	200.2	122.4	77.8**	21.9

NOTE: The earnings data presented in the first three columns are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, and length of site operation.

**Statistically significant at the 5 percent level on a two-tailed test.

Our overall assessment of these findings is that the program did significantly increase the employment and earnings of experimentals, particularly during the early months when most held Supported Work jobs. During the 18-month period under study here, experimentals in the AFDC sample participated in Supported Work for just over nine months, on average, and they worked about 1,400 hours and earned $4,500 more than their control group counterparts. The observed declines in experimental-control group differences over time had been anticipated both because some experimentals were expected to leave the program and not find other employment immediately and because some controls would become employed. In addition, many experimentals earned eligibility for unemployment compensation as a result of their Supported Work jobs[1/] and this is likely to have led to a sharper decline in experimentals' immediate post-program employment than would have occurred in the absence of the program.[2/]

2. Differences in Results Among Sites and Subgroups of The Sample

It is important to consider whether the effects of Supported Work vary significantly across sites or among subgroups of the AFDC

[1/] The New York program participated in the State Unemployment Compensation program. In other sites, the programs did not participate in the Unemployment Compensation program, but Supported Work participants could gain eligibility for benefits under the federally funded Special Unemployment Assistance Program.

[2/] Preliminary evidence suggests that experimentals reduced their employment during the 16-to-18-month period by as much as 10 hours per month as a result of becoming eligible for unemployment compensation--suggesting that, in the absence of the program, experimentals would have worked 27 hours per month and earned $123 per month more than controls.

sample. The results of such an analysis potentially could be important in determining what aspects of the program work or for whom it has a favorable effect. Table III.5 presents, for the first and second 9-month periods, regression adjusted estimates of experimental-control differences in hours worked for subgroups of the sample defined by site, program age, and selected personal characteristics. (The results for employment rates and earnings would undoubtedly be quite similar.) Below, we note cases where site effects vary between the 10-to-18-month and the 16-to-18-month periods. However, we did not conduct the full subgroup analysis for this latter three-month period.

As can be seen in Table III.5, the results vary considerably across sites. Although the program led to an overall 115 hours per month increase in employment during the first 9-month period, the estimated difference for women in Newark was 135 hours per month and in Wisconsin it was only 43 hours. During the second 9-month period, the overall differential between experimentals and controls was 44 hours per month; however, in Atlanta, Newark, and Oakland, experimentals worked between 53 and 65 hours per month more than controls, while in other sites there were much smaller, and sometimes insignificant, differences.[1/]

Several possible explanations for the site differences have been considered. The first is that they might be due to variations in local labor market conditions. The data do not bear this out, however. During

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[1/] By the 16-to-18-month period, only those experimentals in Atlanta, Newark, and Oakland worked significantly more than their control counterparts. The estimated differences were 36, 42, and 39 hours per month, respectively.

TABLE III.5

HOURS EMPLOYED PER MONTH, EXPERIMENTAL-CONTROL DIFFERENTIALS,

AFDC SUBGROUPS

Subgroup	Months 1-9		Months 10-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Total Sample	115.2**	22.8	43.8**	34.0
Site[a]				
Atlanta	120.0**	29.9	53.2**	41.2
Chicago	109.1**	28.0	35.0**	39.3
Hartford	124.2**	24.8	43.0**	36.1
Newark	135.0**	13.3	65.1**	24.1
New York	107.6**	23.7	34.3**	35.0
Oakland	119.1**	14.9	53.1**	26.0
Wisconsin	43.2**	35.5	-15.3	46.8
Length of Site Operation at Time of Enrollment				
6 months	114.4**	22.7	43.0**	34.0
15 months	115.4**	22.8	44.0**	34.1
Eligibility Status				
Eligible	113.6**	22.9	42.2**	34.2
Ineligible	123.8**	22.5	52.4**	33.8
Length of Longest Job				
None	126.8**	17.3	55.4**	28.6
1-12 months	115.2**	20.3	43.6**	31.6
>12 months	111.8**	25.8	40.4**	37.1
Weeks Worked Year Prior to Enrollment[a]				
None	117.7**	20.0	46.3**	31.3
Five	114.2**	24.0	42.8**	35.3
Ten	110.6**	28.0	39.2**	39.3

TABLE III.5 (Continued)

Subgroup	Months 1-9 Experimental-Control Differential	Months 1-9 Control Group Mean	Months 10-18 Experimental-Control Differential	Months 10-18 Control Group Mean
Job Training Year Prior to Enrollment				
Less than 8 weeks	115.9**	21.5	44.5**	32.8
Eight or more weeks	105.7**	43.4	34.3**	54.7
Welfare and Food Stamp Bonus Value				
$100 per month	122.3**	15.1	50.9**	26.4
$300 per month	116.8**	21.1	45.4**	32.4
Child Younger than 12				
None	118.6**	24.9	47.2**	36.2
One or more	114.0**	22.0	42.6**	33.3

NOTE: The data are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, and program age. The equation used to estimate site effects did not permit variation in results among the other subgroups, and vice versa.

[a/] Estimated program effects vary significantly among the subgroups.

**Experimental-control differences for the subgroups are statistically significant at the 5 percent level.

the period covered by this study the unemployment rate was highest overall and fell the most in Newark, New York, and Oakland; hours worked by controls were relatively low and experimental-control differences were relatively large in only two of these sites--Newark and Oakland--and in Atlanta.

A second explanation for the differences in results across sites is that they might be related to site start-up problems. However, the results are not very sensitive to the length of time a program at a particular site has been in operation.

Finally, we expected that the differences in eligibility for and information concerning unemployment compensation may have accounted for part of the variation by site. (Such differences could result largely from differences in length of stay in Supported Work.) The most noteworthy factor in this regard is that 59 percent of the experimental group in New York received UC payments during the second 9-month period, many beginning in the month 12 when their program eligibility terminated. This alternative source of income undoubtedly had a depressing impact on the hours worked among the New York experimentals after they left Supported Work. Receipt of unemployment compensation was not, however, very prevalent among the other sites characterized by relatively low post-program hours worked by experimentals.

Few differences were found when experimental-control differences were compared on the basis of prior work experience, prior welfare receipt, and age of youngest child at the time of enrollment. The only statistically significant relationship between those personal characteristics considered and experimental-control differences was observed for the number

of weeks the woman worked during the year prior to enrollment: during the second 9-month period, the differential was 18 percent larger for those with no employment in the year prior to enrollment than it was for those who had worked 10 weeks. However, this larger hours differential occurred because controls with fewer prior weeks worked also worked considerably less during this follow-up period, rather than because their counterparts in the experimental group worked more. Although the estimated experimental-control differences tended to be larger for those with the least prior employment experience, the least job training, lower welfare benefits, and no young children to care for, the differences between the subgroup effects are not statistically significant.

3. Patterns of Employment

In order to better understand these results, it is useful to consider a number of issues related to patterns of employment. What proportion of experimentals and controls participated in the labor force? How many members of the experimental group found nonprogram employment upon leaving Supported Work? How different was the placement help received? How stable is employment in these nonprogram jobs? Are the nonprogram jobs subsidized? We discuss each issue, in turn.

One of the primary effects of Supported Work was to increase labor force participation and to decrease unemployment.[1/] Nine months after enrolling in the demonstration, 82 percent of the experimental group was in the labor force (77 percent were employed either in Supported

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[1/] Labor force status is defined according to the BLS criteria (U.S. Bureau of Labor Statistics, 1976).

Work or in other jobs and 5 percent were unemployed) compared with only 46 percent of the control group (20 percent were employed and 26 percent were unemployed over the same period). Eighteen months after enrollment, a sizable differential in labor force participation persisted: 67 percent of experimentals and 50 percent of controls were in the labor force, and 35 and 28 percent, respectively, were employed. Half of the experimental group who became unemployed during the second 9-month period were looking for work; the other half dropped out of the labor force.[1/] Among controls, employment increased by 43 percent during the second 9-month period.

The non-Supported-Work employment experience of the sample is reflected in Table III.6. Nearly all experimentals had left Supported Work during the 18-month period under study and, of those leaving, 41 percent held a nonprogram job. While a higher percentage of controls (46 percent) held a job during this period, when employment rates are adjusted for the number of weeks experimentals were in Supported Work we find that experimentals were employed 28 percent of the weeks after they left the program and controls were employed only 21 percent of the weeks they potentially were available for work.

Not surprisingly, given the objectives of Supported Work, many more of the experimentals' nonprogram jobs were the result of formal

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[1/] It should be noted that, during the first 9-month period after enrollment, less than 19 percent of those experimentals and 42 percent of the controls with children younger than 13 who were not in the labor force reported that they were not looking for work because of child care responsibilities. By the second 9-month period, just over half of the experimentals and the controls gave child care problems as a reason for their nonparticipation in the labor force.

TABLE III.6

NONPROGRAM EMPLOYMENT EXPERIENCES, EXPERIMENTALS AND CONTROLS, AFDC SAMPLE

	Months 1-18	
	Experimentals	Controls
Percentage Who Left Supported Work	98.6	n.a.
Average Month of Supported Work Termination	9.7[a]	n.a.
Percentage With Nonprogram Employment[b]	41.2	46.4
Of Those With Nonprogram Employment		
Percentage who found job with help of		
Supported Work	50.4	n.a.
WIN	8.7	26.9
Employment Service	8.7	6.9
Percentage of Available Weeks Employed	66.2	44.3
Hours Worked Per Week[c]	24.7	14.4
Average Hourly Wages[d]	$3.68	$2.96
Percentage With CETA or WIN Jobs	19.9	22.5
Percentage With CETA, WIN, or Government Jobs	40.6	33.1

[a] Eleven percent of the sample left the program more than once. On average, individuals were in Supported Work 8.9 months at the time of their first termination. The overall average length of stay was 9.4 months.

[b] The average number of spells of continuous employment was 1.1 for experimentals and 1.3 for controls.

[c] For experimentals, the average hours worked per week were calculated from the number of weeks since leaving the program.

[d] These wage rates are calculated as the average, for all individuals who had jobs, of their total earnings divided by the number of hours they worked.

n.a. = not applicable.

job placement help than were the jobs found by controls. Half of the experimental group working in nonprogram jobs found their jobs with the help of Supported Work itself; 9 percent used the WIN program; 9 percent used the Employment Service; and the remainder found their jobs through less formal means, such as through a friend. In comparison with the experimentals, the controls had less help finding their jobs: 27 percent of controls reported that they were aided by the WIN program; 7 percent used the Employment Service; the rest went through informal channels.

Probably at least partly as a result of this help, experimentals who found nonprogram employment were employed a much greater share of the time available to them (i.e., after leaving Supported Work) than were the controls in the time available to them (i.e., the whole period since assignment to control group status). Experimentals who had a nonprogram job found it within an average of two months after leaving the program; controls took an average of six months to find their first job. Furthermore, we observed that experimentals who had nonprogram jobs worked an average of 25 hours per week (37 hours during the weeks employed), while controls worked only 14 hours per week (33 hours during the weeks employed).[1/]

A substantial portion of those employed in both groups held subsidized jobs; 20 and 23 percent, respectively, reported that their

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[1/] Comparable figures for the full sample of experimentals who had left Supported Work and for controls are 10 hours and 28 percent of the weeks for experimentals and 7 hours and 21 percent of the weeks for controls.

jobs definitely were CETA or WIN jobs, and as many as 41 and 33 percent of the two groups, respectively, may have held subsidized jobs.

These early employment results for the AFDC sample are encouraging. Not only did experimentals work more hours and earn higher incomes, even into the 16-to-18-month period when only 9 percent of experimentals were still in Supported Work at all, but the experimental group also tended to exhibit a more favorable pattern of employment after leaving the program than was observed among controls. Experimentals were more likely to participate in the labor force, worked a higher percentage of time, worked more hours per week, and earned a higher wage rate on average than did controls.

B. WELFARE RECEIPT, OTHER SOURCES OF INCOME, AND IN-KIND BENEFITS

In this section we describe the main sources of unearned income available to the AFDC population and how the benefits are calculated. (Receipt of such benefits generally is conditional upon earned income. It should be kept in mind, however, that the availability of these alternative income sources may, in turn, influence employment and earnings.) We then compare the relative importance of different income sources for AFDC experimentals and controls during the first 18 months following enrollment and discuss the extent to which variation in experimental-control differences in welfare income is related to site, length of site operation, and personal characteristics of the sample. Finally, we consider income received by other household members.

1. Sources of Unearned Income

The major public assistance program relevant to this sample is, of course, Aid to Families with Dependent Children.[1/] Other forms of unearned income or in-kind assistance include food stamps, Medicaid, public housing, child care subsidies, and unemployment compensation.

The AFDC program was initiated in the 1930s as a federally funded program of assistance to families with a single parent. By 1976, 11 million people were receiving AFDC benefits (Carcago and Corson, 1977). Currently, the program is financed jointly by the federal, state, and local governments; just over half its costs are borne by the federal government, with state and local governments contributing the remainder (Levitan, 1976). Although the federal government has specified broad guidelines for administering the AFDC program, eligibility criteria and maximum benefit levels are determined by the individual states and do, in fact, vary widely. Each state also sets a payment standard that it deems reasonable for the subsistence of a family of a particular size. Table III.7 shows payment standards and maximum benefit levels for a family of four in the states represented in this component of the evaluation. The amount of payment is computed by subtracting other unearned and a portion of earned income minus selected work-related expenses from the payment standard. The resulting sum is then compared

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[1/] General Assistance (GA) and Supplemental Security Income (SSI) may become more relevant for this sample as their personal and/or economic circumstances change. Also, some sample members may receive income under more specialized public assistance programs. The percentages receiving income from these other programs are so small, however, that such income is typically referred to as miscellaneous welfare income.

TABLE III.7

KEY PARAMETERS OF AFDC PROGRAM IN SUPPORTED WORK SITES, JULY 1976

State	Monthly Payment Standard[a] Amount	As a Percentage of Need Standard	Estimated Percentage of Earnings Subtracted from Welfare Benefit[b]
California	379	90	17
Connecticut	405	100	n.a.
Georgia	148	65	28
Illinois	317	100	43
New Jersey	356	100	36
New York	422	100	26
Pennsylvania[c]	373	100	32
Wisconsin	424	91	n.a.

[a] These data refer to the parameters for a family of four recipients. In all of these states, the maximum monthly payment was equal to the monthly payment standard. These data were obtained from Aid to Families with Dependent Children, DHEW Publication (SRS) 77-03200, February 1977.

[b] These estimates, commonly referred to as the benefit reduction rate, are from Hutchens (1977).

[c] The Philadelphia Supported Work program (the only one in Pennsylvania) does not serve the AFDC target group. Nonetheless, since some members of the ex-addict, ex-offender, and youth groups may be eligible for AFDC benefits, we have presented these key program parameter data for Pennsylvania also.

n.a. = not available.

with the maximum benefit amount payable in the jurisdiction, and the lesser of the two amounts is paid to the eligible recipient.[1/]

The food stamp program is administered uniformly across states according to federal standards. In 1976, any family of four with countable monthly income[2/] under $553 was eligible to purchase food stamps. The recipient's purchase price for the stamps was always lower than the cost of the food that could be bought with the stamps. The poorer the recipient, the lower the ratio of purchase price to food stamp value. Representative examples of food stamp benefits for a family of four with varying monthly income are given in Table III.8. It should be noted that recipients generally were required to purchase their full allotment.[3/]

Medicaid is available to all public assistance recipients in all the Supported Work sites. A number of states also extend benefits to others designated as "medically needy." The value of such benefits is usually substantial. For example, the average annual benefit per recipient AFDC family was about $770 in fiscal year 1973 (Storey, 1974).

[1/] The actual payments formula can be represented as

$$\text{Payment} = \text{minimum}\left\{PS - Y_u - \max\left[0, .67(Y_E - 30) - D\right], M\right\}$$

where PS = payment standard

Y_u = unearned income

Y_E = earned income

D = allowable deductions from income

M = the maximum payment.

[2/] Countable income is roughly the sum of earned and unearned income minus deductions, which include work-related expenses.

[3/] In October 1978 the Department of Agriculture began phasing out the purchase requirements. After January 1, 1979, food stamp allotments will be distributed without a purchase requirement.

TABLE III.8

EXAMPLES OF FOOD STAMP BENEFITS

FOR A FAMILY OF FOUR, JULY 1976

Monthly Countable Income	Allotment	Cost	Bonus Value
$ 30	$166	$ 0	$166
100	166	25	141
200	166	53	113
300	166	83	83
400	166	113	53
500	166	131	35
553[a/]	0	n.a.	n.a.

Source: The Federal Register, July 2, 1976.

[a/] During this period, eligibility for food stamp benefits was conditional upon maximum countable income of $553 or less for a family of four.

n.a. = not applicable.

The most frequent form of housing assistance available to Supported Work enrollees is public housing. This program, which is administered by the local housing authorities, provides units to low-income families at rents calculated on the basis of the family's ability to pay. In 1975, the average annual subsidy for such units was about $1,200 (Levitan, 1976). In some areas, rent supplements may also be provided to poor families who live in private dwelling units.[1/]

Federally funded day-care facilities, both formal and in-home, have existed since 1962. Child-care funds also have been legislated specifically for participants in the Work Incentive (WIN) program. In addition, many states have their own subsidized child-care programs.

Unemployment Compensation (UC) was designed to provide transitional income support to individuals who were temporarily unemployed. As such, eligibility and benefit levels are based entirely on past employment history. Almost none of the Supported Work sample would have been eligible for unemployment compensation at the time of their enrollment in Supported Work because of their limited work experience. However, by virtue of participating in Supported Work, some experimentals have since become eligible for a specific type of unemployment compensation called Special Unemployment Assistance (SUA).[2/] SUA was a temporary program enacted in 1974 to extend unemployment compensation coverage to

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[1/] The incidence of rent subsidies was reported to be very low among the Supported Work sample.

[2/] No Supported Work sites pay into the regular UC program except in New York, where it is required by state law.

individuals who met the standard UC eligibility criteria but were employed by businesses not covered by the regular UC program. The maximum duration of benefits under SUA was 26 weeks. The maximum duration under regular UC in the states that have Supported Work programs ranges from 26 to 34 weeks.[1/]

Finally, income may be received from assistance programs such as Social Security and Veteran's Benefits. However, because of their special eligibility requirements, the incidence of receipt of such income among the Supported Work sample is low. We have therefore grouped this income along with that from pensions, alimony, child support, and job training under the heading "other unearned income."

2. Overall Experimental-Control Differences in Income from Various Sources

In this section we compare the total income and the pattern of income sources of experimentals and controls during the eighteen months after enrollment. Figure III.2 identifies the various components of income discussed. We consider earnings, unemployment compensation, welfare, food stamp bonuses, and other unearned income in this subsection. Medicaid, public housing, and child care are discussed in the next subsection below.

At the time of enrollment, most members of this sample had no earnings and virtually all received welfare benefits through the AFDC program.[2/] As shown in Table III.9, there was a sharp change in the

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[1/] Durations have been extended during periods of economic recession.

[2/] These characteristics, it should be remembered, are directly due to program eligibility criteria for this target group, as reflected in Table II.1.

FIGURE III.2

CATEGORIES OF INCOME AND IN-KIND BENEFITS USED IN THE ANALYSIS

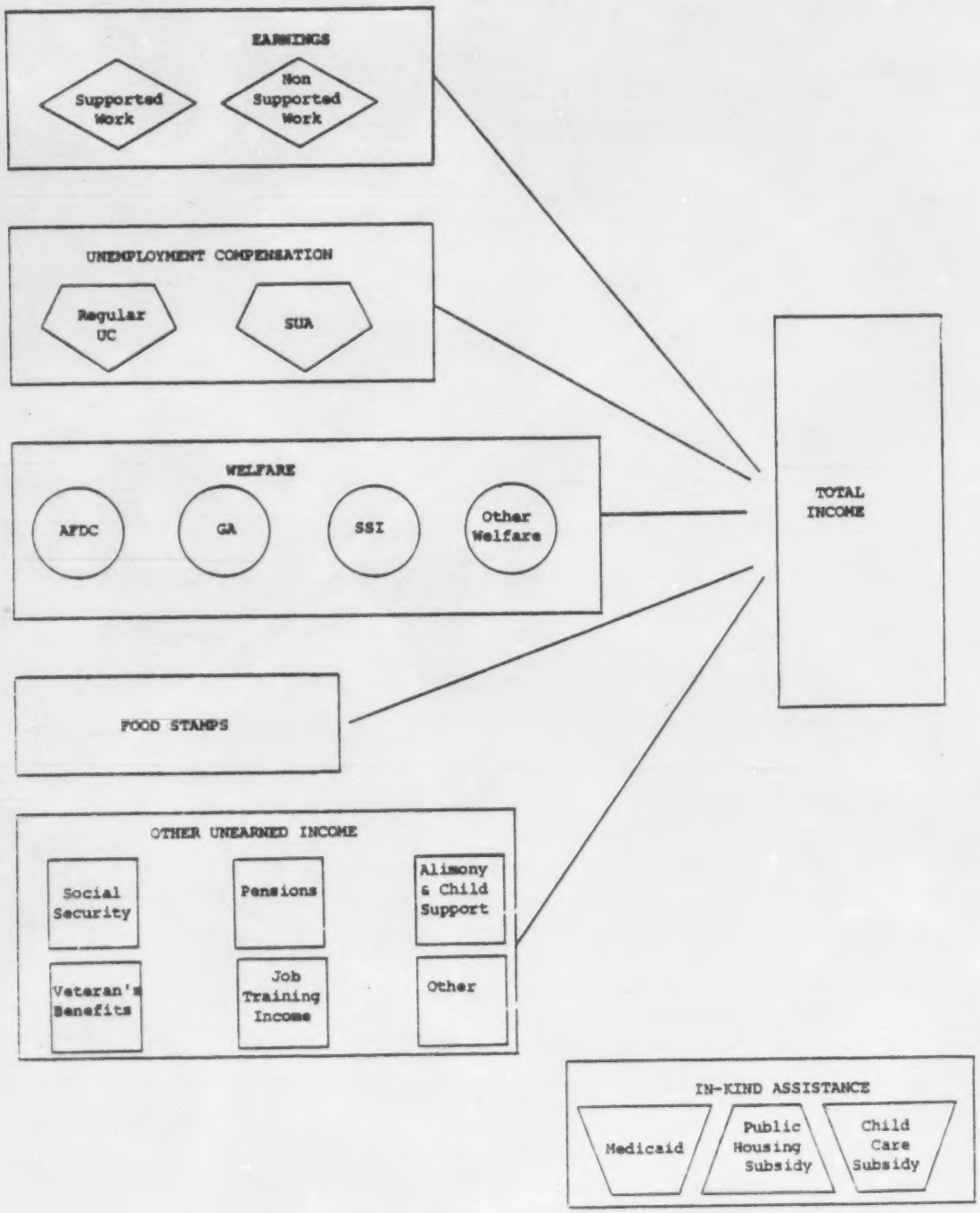

TABLE III.9

INCOME RECEIVED FROM VARIOUS SOURCES, EXPERIMENTALS AND CONTROLS,

AFDC SAMPLE

	Months 1-9			Months 10-18			Months 16-18		
	Experimentals	Controls	Experimental-Control Differential	Experimentals	Controls	Experimental-Control Differential	Experimentals	Controls	Experimental-Control Differential
Percentage Receiving Income from									
Earnings	96.1	33.2	62.9**	75.5	36.4	39.1**	40.7	30.3	10.4**
Unemployment compensation	0.2	1.6	-1.4**	23.3	2.6	20.7**	20.4	2.0	18.4**
Welfare[a/]	93.5	99.4	-5.9**	79.7	91.1	-11.4**	70.4	85.4	-15.0**
Food stamps	86.8	95.2	-8.4**	72.6	87.0	-14.4**	66.3	81.9	-15.6**
Other unearned income	11.8	14.1	-2.3	7.8	13.1	-5.3**	8.0	8.9	-0.9
Average Monthly Income from All Sources	$634.0	$408.6	$225.4**	$513.8	$426.3	$87.5**	$473.6	$429.7	$43.9**
Earnings	410.1	58.7	351.4**	262.2	109.8	152.4**	200.2	122.4	77.8**
Unemployment compensation	0.1	1.9	-1.8**	32.1	3.6	28.5**	51.6	5.0	46.6**
Welfare[a/]	163.7	273.7	-110.0**	160.0	241.9	-81.9**	161.5	233.1	-71.6**
Food stamp bonus value	45.4	64.9	-19.5**	42.6	60.8	-18.2**	44.4	59.7	-15.3**
Other unearned sources[b/]	15.6	10.2	5.4	11.8	12.2	-0.4	12.8	11.7	1.1

NOTE: The data are regression adjusted estimates that control for differences in income receipt from various sources due to age, sex, race, education prior work and job training experiences, household composition, prior receipt of income from the source, site, and length of site operation.

[a/] Welfare includes AFDC, GA, SSI and other unspecified welfare income.

[b/] Other unearned income includes Social Security, pensions, alimony, child support.

**Statistically significant at the 5 percent level on a two-tailed test.

income sources of experimentals, in particular, during the post-enrollment period.[1/] As noted in the previous section, a significantly higher percentage of experimentals than controls had earnings during this period, although the differential declined from 63 to 10 percentage points between the first 9-month period and the 16-to-18-month period after enrollment. Partially offsetting this decline in the percentage with earnings, however, was a sharp increase in the percentage of experimentals relative to controls who received unemployment compensation. Less than 2 percent of either group received such benefits during the first 9-month period. During the 16-to-18-month period, this figure had risen to 20 percent of the experimentals and only 2 percent of the controls.

Largely as a consequence of this change in employment-related income, there was a significant reduction in the percentage of experimental group members relative to controls who received welfare and food stamp benefits. During the first 9-month period, the experimental-control differentials were 6 percentage points for welfare and 8 percentage points for food stamps, and, by the 16-to-18-month period, they had risen to 15 and 16 percentage points, respectively. This increase in the differentials over time was partially a result of administrative

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[1/] The welfare income and food stamp bonus value data reported in Table II.4 are not directly comparable to those presented in earlier project reports. Here, welfare income is defined as cash transfers, including SSI, while in previous documents welfare income included the bonus value of food stamps and excluded SSI. The food stamp bonus values reported here assume that respondents who received food stamps but did not know their value received stamps worth the average bonus value of all recipients in their target group. Previous reports have variously excluded cases where the bonus value is missing or assumed that the value was zero. Missing data on food stamp bonus values is especially prevalent among those who live with their parents and thus are not the primary recipients.

lags in the welfare system that prevented experimentals' welfare from dropping during their first months in Supported Work; but it was undoubtedly also due, in part, both to the rise in other forms of unearned income and to the characteristics of the welfare benefit structure: those already receiving welfare are permitted to earn substantially more before their benefits fall to zero than new applicants can earn and qualify for benefits.

Over most of the 18-month period, we saw little change in the receipt of income from other sources such as pensions, alimony, and child support.

Having observed these experimental-control differences in the sources of income, it is not surprising to see in the lower portion of Table III.9 that the proportional contribution of these various income sources to total income is substantially different for experimentals than for controls and, furthermore, that these differentials in income by source vary over time.

During the first 9-month period, experimentals received a total income of $634 per month while controls received only $409 per month, a difference of $225 per month. Sixty-five percent of the experimental group's income during this period was earnings, and only 33 percent was from welfare and food stamps. By contrast, only 14 percent of the control group's income was from earnings and over 80 percent was from welfare and food stamp benefits. Because of the work-incentive provisions of the welfare and food stamp programs, the gains in experimentals' earnings were only partially offset by reductions in welfare benefits, however. The effective welfare benefit reduction rate on earnings was in the

neighborhood of 30 to 40 percent, depending upon whether or not food stamp bonuses are considered.

During the second 9-month period after enrollment, the total income differential between experimentals and controls narrowed considerably, to only $88 per month. This was due mainly to a decline in the experimental group's earnings, which dropped substantially--from $410 per month in the first 9-month period to $262 per month in the second 9-month period; only part of this decline was offset by the $32 per month rise in unemployment compensation. However, welfare and food stamp bonuses of experimentals remained relatively constant over time ($209 and $203 per month in the first and second 9-month periods, respectively).[1/] By contrast, the control group's earnings increased by 86 percent, from $59 to $110 per month between the first and second 9-month periods. (Their unemployment compensation remained very low, $2 to $4 per month.) But their welfare and food stamp income dropped by $36 per month.[2/] (These trends in overall welfare and food stamp benefits of experimentals and controls can be seen clearly in Figure III.3.) Over the full 18-month period, the reduction in welfare and food stamp benefits received by experimentals relative to controls is valued at $2,066, on average.

[1/] The stability of welfare income is due to other unearned income (which is taxed at 100 percent in the computation of welfare benefits) having risen, as earnings (which are taxed at a much lower rate) fell.

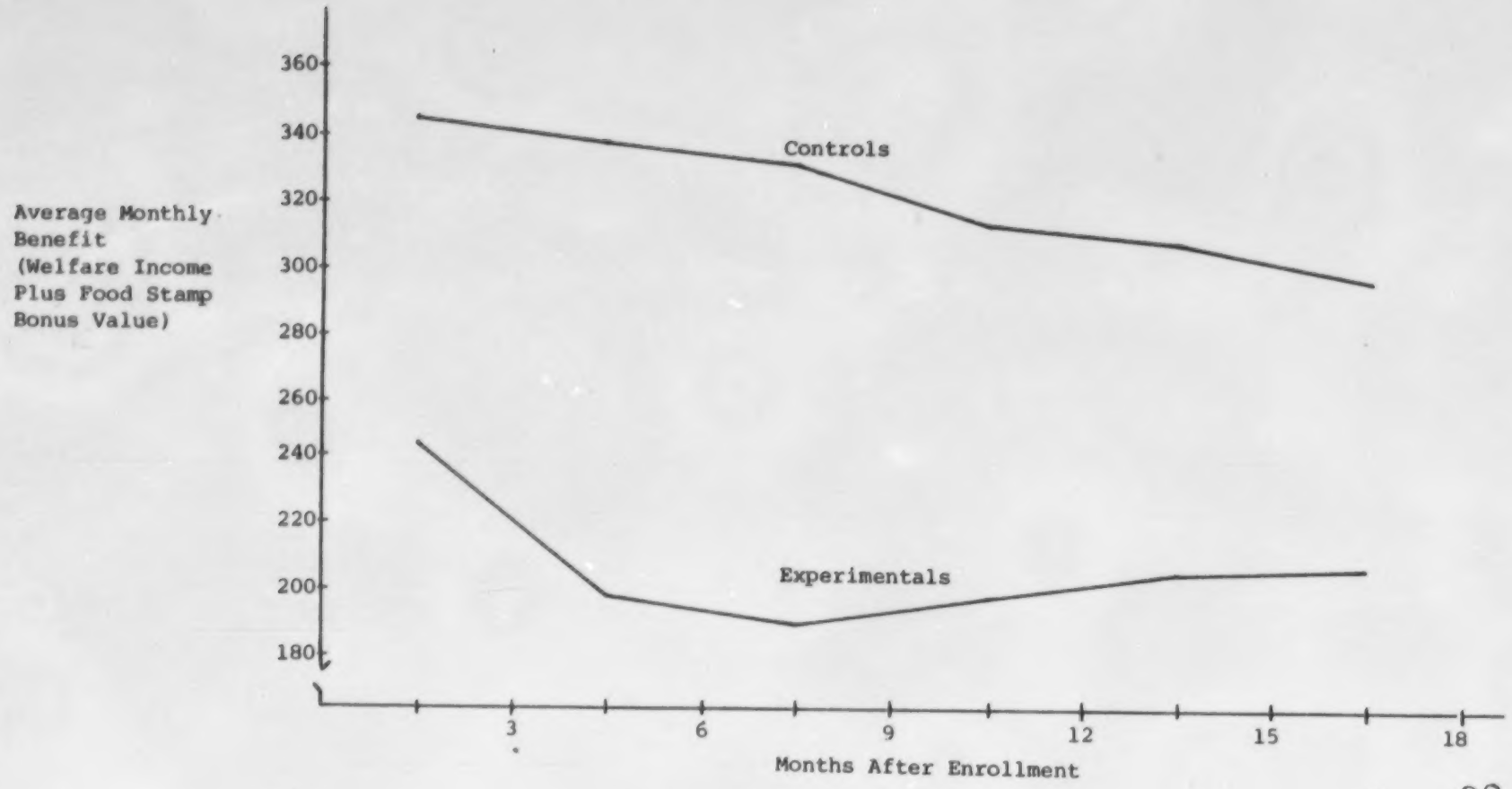
[2/] Adjusting for the difference in other sources of unearned income such as UC, the observed marginal welfare tax (including food stamp bonuses) on earnings ranged between 23 percent in the first three months and 52 percent in the 16-to-18-month period. Excluding food stamps, the tax did not exceed 35 percent.

FIGURE III.3

AVERAGE MONTHLY WELFARE INCOME PLUS FOOD STAMP BONUSES RECEIVED,

EXPERIMENTALS AND CONTROLS,

AFDC SAMPLE



NOTE: All experimental-control differences are statistically significant at the 5 percent level.

3. Experimental-Control Differences in Receipt of In-Kind Assistance

Table III.10 presents data related to receipt of various types of in-kind assistance. During the first nine months after enrollment, there was no difference between experimentals' and controls' receipt of medical assistance. However, public housing subsidies averaged $12 per month less for experimentals than for controls, and the percentage receiving subsidized child care or a reimbursement for child care was significantly higher among experimentals, owing largely to their greater use of child care services.[1/]

During the 10-to-18-month period, we observed significant reductions in receipt of medical assistance benefits and in public housing rents among experimentals relative to controls. Three-fourths of the experimentals reported having a Medicaid card during this period, compared with 88 percent of controls. And among those with cards, nearly all in both the experimental and control groups reported that they had owned them during the full 10-to-18-month period.

There were no reported differences in public housing residence between experimentals and controls. However, as we might have expected, rent paid by experimentals living in public housing increased by $15 per month on average at the same time that their earnings, relative to controls', was $200 per month higher.

[1/] During the first 9-month period after enrollment, 55 percent of experimentals as compared with 14 percent of controls used child-care services. During the second 9-month period, the percentages were 33 and 11 for experimentals and controls, respectively. Over 96 percent of those using child-care services in both groups used informal arrangements, in their own or others' homes.

TABLE III.10

IN-KIND ASSISTANCE RECEIVED, EXPERIMENTALS AND CONTROLS,

AFDC SAMPLE

	Months 1-9			Months 10-18		
	Experimentals	Controls	Experimental-Control Differential	Experimentals	Controls	Experimental-Control Differential
Medical Assistance:						
Percentage with Medicaid card	94.7	94.8	-0.1	75.0	88.1	-13.1**
Number of months with Medicaid card	8.0	8.2	-0.2	6.7	7.7	-1.0**
Housing Subsidy:						
Percentage living in public housing	38.0	39.1	-1.1	37.7	40.0	-2.3
Rent of public housing residents (dollars per month)	94.90	83.05	11.85**	95.46	80.41	15.05**
Percentage receiving rent subsidy[a/]	1.9	2.9	-1.0	1.4	1.5	-0.1
Rent subsidy (dollars per month)	2.46	3.71	-1.25	2.04	2.41	-0.37
Child Care Subsidy:						
Percentage receiving child care subsidy	18.1	3.8	14.3**	7.8	2.3	5.5**
Percentage receiving child care reimbursement	11.7	1.2	10.5**	6.7	5.8	0.9**
Child care reimbursement (dollars per month)	5.62	0.30	5.32**	3.45	0.52	2.93**

NOTE: These data are simple subgroup means. The test statistics are t-tests of the differences between the subgroup means.

[a/] A rent subsidy is defined as rent paid directly to the landlord by the welfare agency.

**Statistically significant at the 5 percent level on a two-tailed test.

During the second 9-month period, the percentage reporting subsidized child care was 6 points higher among experimentals than among controls, and the average dollar value of direct reimbursement for child-care expenses was $3 more for all experimentals than for all controls. (This figure increases to $4 when the average is restricted to those using child care, probably because experimentals used services for a longer period of time than controls.)

4. Differences in Welfare Results Among Subgroups of the AFDC Sample

Table III.11 presents, for the first and second 9-month periods after enrollment, regression adjusted experimental-control differences in the value of welfare and food stamp bonuses for subgroups of the AFDC sample. The results vary considerably across sites, partly as a result of differences in local administrative regulations but primarily because of differences in earnings and other sources of unearned income. During the first nine months, the average differentials in monthly welfare benefits plus food stamp bonuses between experimentals and controls were largest in Oakland and Hartford ($174 in each) and smallest in Wisconsin ($30). During the 10-to-18-month period, the largest differentials were in Oakland ($146) and Newark ($134), which were also sites with relatively large earnings differentials during the period. The relatively large differential in the value of benefits received by the New York sample ($122) is noteworthy, since a very large portion of the difference was due to the $57 per month higher unemployment compensation received by experimentals relative to controls. (New York was also among the sites with the lowest earnings differential for the AFDC target group during

TABLE III.11

VALUE OF WELFARE AND FOOD STAMP RECEIPTS, EXPERIMENTAL-CONTROL DIFFERENTIALS, AFDC SUBGROUPS

Subgroup	Months 1-9		Months 10-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Total	-128.8**	337.6	-103.8**	303.7
Site[a/]				
Atlanta	-89.6**	270.9	-56.2**	237.0
Chicago	-102.4**	302.9	-66.9**	269.0
Hartford	-173.5**	308.8	-117.6**	274.9
Newark	-152.9**	366.3	-134.3**	332.4
New York	-136.9**	368.9	-121.7**	335.0
Oakland	-174.4**	361.4	-145.8**	327.5
Wisconsin	-30.0**	316.5	-12.0	282.6
Length of Site Operation at Time of Enrollment				
6 months	-148.0**	346.5	-123.0**	312.6
15 months	-124.2**	335.7	-99.2**	301.8
Eligibility Status				
Eligible	-125.9**	335.6	-100.9**	301.7
Ineligible	-141.9**	348.2	-116.9**	314.3
Length of Longest Job				
None	-149.8**	347.7	-124.9**	313.8
1-12 months	-124.3**	335.7	-99.3**	301.8
>12 months	-124.2**	335.4	-99.2**	301.5
Weeks Worked Year Prior to Enrollment				
None	-132.1**	340.0	-107.1**	306.1
Five	-126.9**	336.6	-101.9**	302.7
Ten	-121.6**	333.1	-96.6**	299.2

TABLE III.11 (Continued)

Subgroup	Months 1-9 Experimental-Control Differential	Months 1-9 Control Group Mean	Months 10-18 Experimental-Control Differential	Months 10-18 Control Group Mean
Job Training Year Prior to Enrollment				
Less than 8 weeks	-127.6**	338.5	-102.6**	304.6
Eight or more weeks	-140.4**	323.4	-115.4**	289.5
Welfare and Food Stamp Bonus Value				
$100 per month	-115.6**	186.8	-90.6**	152.9
$300 per month	-125.6**	302.8	-100.6**	270.9
Child Younger than 12				
None	-144.2**	328.9	-119.2**	295.0
One or more	-122.8**	340.7	-97.8**	306.8

NOTE: These data are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, and length of site operation. The equation used to estimate site effects did not permit variation in results among the other subgroups, and vice versa.

[a] Estimated program effects among these subgroups vary significantly.

**Experimental-control difference for the subgroup is statistically significant at the 5 percent level.

this period, $34 per month.) A portion of the difference between the welfare benefits of experimentals and those of controls in Atlanta, Chicago, Newark, and Oakland was also attributable to differential receipt of UC, although to a much lesser degree than for the New York sample. The very small and not statistically significant difference for the Wisconsin sample is consistent with our having also observed no significant difference in earnings for this sample.

Statistically significant reductions in welfare and food stamp benefits by experimentals relative to controls were observed for all sample subgroups considered and for both time periods, and the magnitudes of the experimental-control differences do not vary significantly among or between these various subgroups.

5. Unearned Income of Other Household Members

We observed no experimental-control differences in receipt of unearned income by other household members during the first nine months after enrollment. During the 10-to-18-month period, the only significant effect was a three percentage point drop in other household members' receipt of any welfare income, which led to a $5 per month differential in the amount received. These findings are not surprising in that most of the AFDC sample lived in single assistance unit households.

C. JOB TRAINING AND EDUCATION

During the first 9-month period, there was no significant overall differential in the percentage of AFDC experimentals (11 percent) and controls (8 percent) enrolled in training. However, during the second 9-month period, a significantly higher percentage of controls (8 percent)

than experimentals (3 percent) reported that they had received job training. This shift in results is probably because over 90 percent of the experimentals who reported job training received it through Supported Work[1/] and, thus, terminated the training when they left the program, while nearly half of the controls received their training through WIN.

We also found that a significantly higher percentage of experimentals (21 percent) than controls (11 percent) reported being enrolled in school during the first 9-month period, and that experimentals were enrolled for an average of two weeks longer than controls. In both groups, the enrollment was primarily in vocational and high schools. During the 10-to-18-month period, however, only 8 percent of experimentals and 10 percent of controls reported being enrolled in school.

D. HOUSEHOLD COMPOSITION AND HOUSING CONSUMPTION

The interview data for Supported Work offer two measures of the stability of a respondent's family life: marital status and number of children moving in and out of the household. Marrying may imply a certain degree of personal and economic confidence in the future, as well as a positive self-image. Bringing children back into the household who had been sent to live with relatives or friends or placed in foster homes is another indication of increased household stability that could also be engendered by a more positive economic and personal outlook for a stable future. During the period under study, no significant differences appeared between AFDC experimentals and controls in these measures of

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[1/] Most experimentals receiving training through Supported Work were in New York and Atlanta.

household stability. Among both experimentals and controls, the average household size was just under four, and between 4 and 6 percent of the respondents at each interview reported being married. Less than 3 percent of those interviewed reported any movement of children into or out of the home.

With respect to housing consumption, several aspects can be studied: homeownership, the amount spent on rent, public housing residence, mobility, and improvements made in one's dwelling. Moving from public housing to private rental or from private rental to buying a home could reasonably be construed as a long-term commitment to economic solvency. An increase in rent could indicate that the respondent had moved to better quarters, either to an area with a lower crime rate or to accommodations with improved facilities. Home improvements may be made as a result of having extra money or learning new construction-related skills.[1/]

Data related to housing consumption are presented in Table III.12. There is very little homeownership among this group and virtually no program-related change in homeownership. This is not unexpected, since even the various income maintenance programs that offered financial support for as long as three years were found to have very little effect on homebuying (Wooldridge, 1977, and Johnson, 1976). We did, however, observe an increase over time in the amount spent on rent by experimentals,

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[1/] The one piece of evidence we have concerning housing quality does not indicate that this sample lived in substandard housing at the time of their enrollment: on average, the AFDC sample lived in units with 1.4 rooms per person, as compared with a national standard of adequate housing of one room per person (Heilbrun, 1973).

TABLE III.12

HOUSING CHARACTERISTICS, EXPERIMENTALS AND CONTROLS,

AFDC SAMPLE

	Month 9			Month 18		
	Experimental	Controls	Experimental-Control Differential	Experimentals	Controls	Experimental-Control Differential
Percentage Who Own Home	3.1	2.3	0.8	3.3	2.6	0.7
Percentage Who Rent	96.4	97.4	-1.0	95.8	96.8	-1.0
Rent for Renters (Dollars per Month)	136.42	124.56	11.86**	140.32	127.13	13.19**
Percentage Living in Public Housing	38.0	39.1	-1.1	37.7	40.0	-2.3
Rent for Those Living in Public Housing (Dollars per Month)	94.90	83.05	11.35**	95.46	80.41	15.05**
Number of Moves (in 9-month period)	0.22	0.14	0.08**	0.19	0.12	0.07**

NOTE: These data are unadjusted subgroup means. The test statistics are based on t-tests of differences in means between experimentals and controls.

**Statistically significant at the 5 percent level on a two-tailed test.

both in absolute terms and relative to controls. The average rent paid by experimentals and controls during the months prior to enrollment was $122. By the end of the second 9-month period, experimentals were paying about $140 per month, compared with $127 per month paid by controls, a difference that is statistically significant. The increase in rent among experimentals resulted, in part, from experimentals being more likely than controls to move into more costly housing as a result of their higher earnings and, in part, from experimentals who were living in public housing paying more rent than their control group counterparts.

CHAPTER IV

FINDINGS FOR THE EX-ADDICT SAMPLE

Ex-addicts who were currently or recently enrolled in a drug treatment program were chosen as a target group for the demonstration with the aim of determining whether the special qualities of the Supported Work program would facilitate their transition to regular employment and to a drug-free life-style. In this chapter, we present the results of an assessment of the program's effects during the first 18 months after assignment, using a sample of 391 ex-addict experimentals and 351 controls.

Philadelphia is the only site enrolling ex-addicts that had a policy of mandatory graduation from the program after 18 months of participation. However, this graduation policy does not seem to have affected the length of program participation. As seen in Table IV.1, less than 2 percent of the experimentals were in the program at the end of the eighteenth month, and only 29 percent stayed in the program through month 12. The average length of stay in Supported Work for the full ex-addict sample was 6.8 months, with only 11 percent reporting that they left the program to take another job or to enroll in an education or training program. About 40 percent said they left for reasons related to poor performance, and the remainder gave other, neutral reasons.[1/]

[1/] The Supported Work Management Information System data indicate that of those ex-addicts in all sites who left Supported Work, 21 percent left for positive reasons, 59 percent for negative reasons, and 20 percent for neutral reasons (MDRC, 1978). Discrepancies between the MIS and interview data may be due to the differences in the time period covered and the sample considered, as well as unavoidable differences in the actual definition of these categories.

TABLE IV.1

LENGTH OF PARTICIPATION IN SUPPORTED WORK AND REASONS FOR DEPARTURE, EX-ADDICT SAMPLE

	Sites with Mandatory Graduation After 12 Months of Participation[a]	Sites with Mandatory Graduation After 18 Months of Participation[b]	Total
Percentage Still in Program at the End of Month			
Three	75.4	57.5	69.2
Six	58.2	38.8	51.5
Nine	48.7	24.5	40.8
Twelve	35.8	15.7	28.9
Fifteen	9.7	7.5	9.0
Eighteen	1.8	1.9	1.8
Average Number of Months in the Program	7.7	5.1	6.8
Percentage Who Left Supported Work:			
To take another job or to enroll in school or job training	12.1	9.7	11.4
For reasons related to poor performance	33.8	53.4	39.8
For other reasons	54.1	36.9	48.8

[a] Chicago, Jersey City and Oakland. No persons in these sites should have been in the program during the 16-to-18-month period. That some report such enrollment may be due to reporting error or to Supported Work's occasional failure to terminate those whose eligibility has expired.

[b] Philadelphia.

No significant effects were found with respect to job training and education, household composition, or housing consumption. This chapter therefore concentrates on employment, receipt of welfare and other income, drug use, and involvement in crime.

A. EMPLOYMENT

1. Overall Experimental-Control Differences

As for other target groups, Supported Work did result in large differences between ex-addict experimentals and controls in the extent of employment during the first 9-month period. However, as shown in Table IV.2, these differences diminished sharply over time. This decline in the experimental-control differences resulted primarily from a drop in the percentage of experimentals employed, from 91 percent during the first three months to only 37 percent during the 16-to-18-month period. Over the same period, the percentage of controls employed rose from 30 to 40 percent.

Largely as a result of these differences in employment rates, in all but the 16-to-18-month period experimentals worked significantly more hours per month than did controls. As shown in Table IV.3 and Figure IV.1, at the outset of the program experimentals worked an average of 140 hours a month, while controls worked only 32 hours. Experimentals' hours dropped by about 15 percent in each successive 3-month period until month 13, when the decline accelerated. Most of the decrease in hours worked by experimentals was the result of reduced hours worked on Supported Work (program) projects.

Even though the hours differentials between experimentals and controls were narrowing, there was a slight improvement in the experimentals'

TABLE IV.2

PERCENTAGE EMPLOYED IN ANY MONTH, EXPERIMENTALS AND CONTROLS,

EX-ADDICT SAMPLE

	Experimentals	Controls	Experimental-Control Differential	Percentage of Experimentals With Only Supported Work Jobs
Months 1-3	91.4	30.0	61.4**	84.8
Months 4-6	77.7	38.5	39.2**	66.2
Months 7-9	67.4	36.2	31.2**	52.7
Months 10-12	55.5	34.7	20.8**	38.1
Months 13-15	50.3	39.7	10.6**	22.5
Months 16-18	36.9	39.5	-2.6	6.1

NOTE: The data on the percentage employed are regression adjusted estimates that control for differences in employment due to age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history. These estimates were calculated using ordinary least square (OLS) techniques. Although probit is a more appropriate estimation technique when the dependent variable takes only two values, results evaluated at the mean have been shown, in general, to be quite similar for the two estimation procedures. We chose to use OLS techniques because we planned to evaluate the experimental-control group differences at the mean values of the independent variables and because this information is more readily available from the standard output from OLS regression packages.

**Statistically significant at the 5 percent level on a two-tailed test.

TABLE IV.3

AVERAGE HOURS WORKED PER MONTH, EXPERIMENTALS AND CONTROLS,

EX-ADDICT SAMPLE

	Experimentals	Controls	Experimental-Control Differential	Program Hours of Experimentals	
				Number	Percent of Total Hours
Months 1-3	140.0	32.2	107.8**	128	91
Months 4-6	116.8	45.0	71.8**	100	86
Months 7-9	97.0	39.6	57.4**	79	81
Months 10-12	83.1	42.4	40.7**	59	71
Months 13-15	64.5	49.5	15.0**	25	39
Months 16-18	47.0	49.4	-2.4	6	13

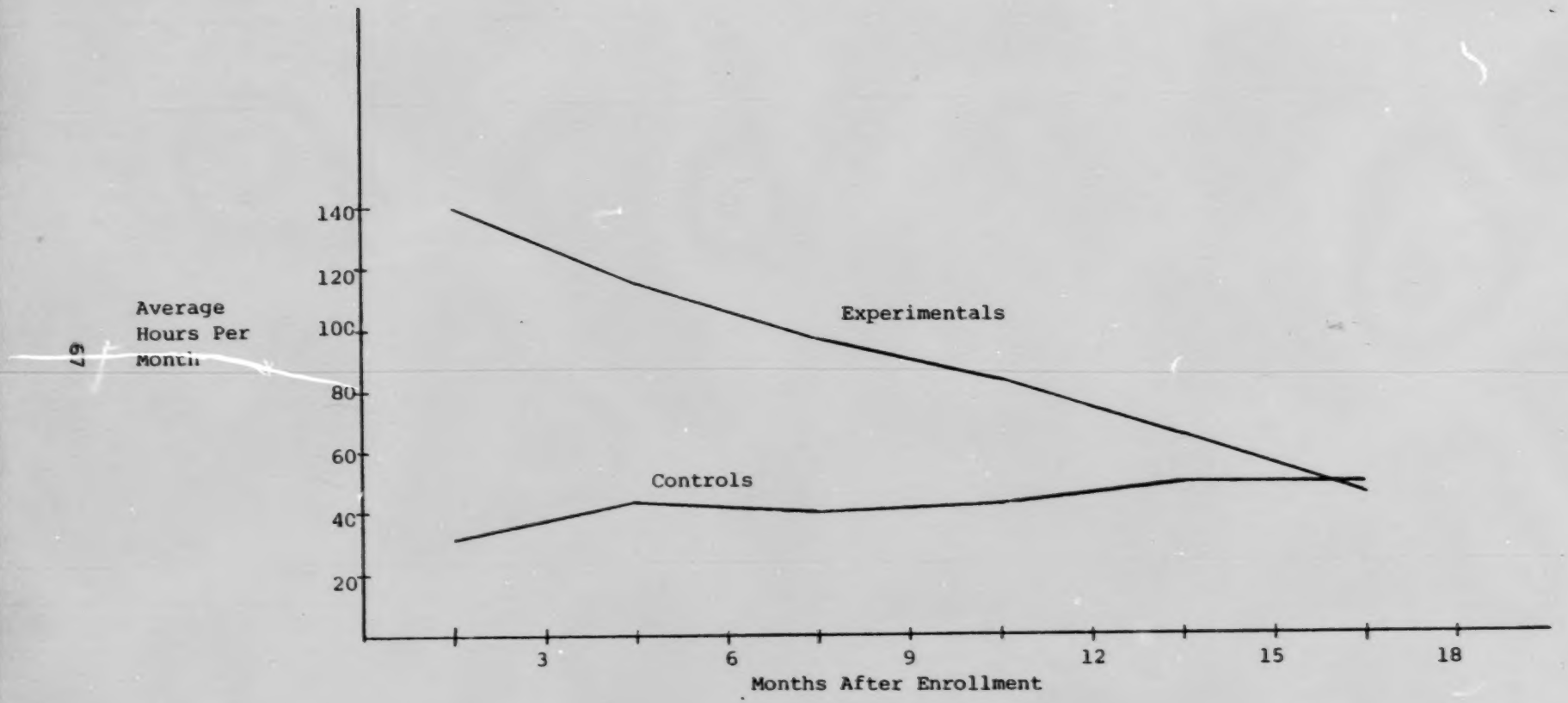
NOTE: The data on hours worked in all jobs, presented in the first three columns, are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history.

**Statistically significant at the 5 percent level on a two-tailed test.

FIGURE IV.1

AVERAGE HOURS WORKED PER MONTH, EXPERIMENTALS AND CONTROLS,

EX-ADDICT SAMPLE



NOTE: All experimental-control differences except that for the last three-month period are statistically significant at the 5 percent level.

job opportunities relative to controls. During the first 9-month period, experimentals and controls commanded similar wage rates in their non-Supported Work jobs ($3.80 and $3.87 per hour, respectively).[1/] Because of the low Supported Work wage rates, however, the experimentals who were employed earned considerably less per hour, on average, than did the controls who were employed.[2/] By the 16-to-18-month period, those 30 percent of the experimental group who worked in nonprogram jobs earned an average of 40 cents per hour more than controls ($4.61 versus $4.21).[3/]

This combination of the employment rate, hours, and wage rate differences produced the earnings differentials presented in Table IV.4. During the first three months after enrollment, experimentals earned $276 per month more than controls. This overall difference in earnings resulted from a combination of different employment rates, hours worked, and wage rates. (Eighty-nine percent of the difference was the result of the higher employment rate among experimentals; higher earnings because of more hours worked by employed experimentals as compared with

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[1/] Average hourly wage rates earned by experimentals and controls (weighted by the number of hours an individual worked) can be calculated by dividing the average monthly earnings data presented in Table IV.4 by the average monthly hours worked presented in Table IV.3.

[2/] Because of the purposeful setting of program wage rates below market opportunity wage rates and because 87 percent of all hours worked by experimentals during the first 9-month period were in Supported Work jobs, the average wage received by experimentals on all jobs during this period was only $2.98 per hour, which is substantially lower than that received by controls.

[3/] Including Supported Work jobs, the wage rate differential during this period was only 20 cents per hour higher for experimentals than for controls ($4.41 versus $4.21), a difference that is not statistically significant.

TABLE IV.4

AVERAGE EARNINGS PER MONTH, EXPERIMENTALS AND CONTROLS,

EX-ADDICT SAMPLE

	Experimentals	Controls	Experimental-Control Differential	Program Earnings of Experimentals
Months 1-3	$398.2	$122.5	$275.5**	$360.2
Months 4-6	350.1	178.0	172.1**	287.2
Months 7-9	307.3	151.7	155.6**	230.2
Months 10-12	289.4	175.1	114.3**	176.9
Months 13-15	252.2	199.9	52.3**	79.6
Months 16-18	207.3	208.0	-0.7	18.1

NOTE: The earnings data presented in the first three columns are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history.

**Statistically significant at the 5 percent level on a two-tailed test.

controls was nearly offset by the experimentals' lower average hourly earnings.) By the 16-to-18-month period, however, there was virtually no difference in earnings of experimentals and controls because of the convergence in their employment rates and hours worked.

Our overall assessment of these findings is that, although Supported Work may have a short-run effect on employment of ex-addicts, the effects do not seem to be long-lived, at least in the context of this demonstration. We should note, however, that the existence of the Special Unemployment Assistance (SUA) program during much of the period undoubtedly led to smaller experimental-control differences during these latter months than would have existed in its absence.[1/]

2. Differences in Results Among Sites and Subgroups

To determine the extent to which these overall findings for employment-related outcomes are the net result of somewhat different effects of the program in the various sites and among subgroups of the sample, we have estimated the differences in hours worked between experimentals and controls in each of the sites that enrolled ex-addicts and in each of a number of other subgroupings. These estimates, for both the first and second 9-month periods, are presented in Table IV.5. They are (as the footnote makes clear) based on regression analysis that simultaneously controls for a number of program and personal characteristics. As can be seen, the values of the estimated program effects vary considerably

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[1/] At this time, only crude estimates of the impact on the overall results for the ex-addict sample have been made. These suggest that experimentals would have worked eight hours more per month than they did during the 16-to-18-month period if the SUA program had not existed. Thus, the resultant hours differential between experimentals and controls would have been six hours more per month rather than the observed two hours less.

TABLE IV.5

HOURS EMPLOYED PER MONTH, EXPERIMENTAL-CONTROL DIFFERENTIALS,

EX-ADDICT SUBGROUPS

Subgroup	Months 1-9		Months 10-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Total	79.0**	38.9	17.8**	47.1
Site				
Chicago	88.0**	36.2	28.7**	44.3
Jersey City	82.4**	45.9	14.6**	54.0
Oakland	83.5**	35.9	25.9	44.0
Philadelphia	68.0**	32.7	12.0*	40.8
Length of Site Operation At Time of Enrollment				
6 months	77.6**	41.6	16.4**	49.7
15 months	79.2**	38.0	18.0**	46.1
Eligibility Status				
Eligible	78.4**	38.3	17.2**	46.4
Ineligible	80.6**	40.4	19.4**	48.5
Length of Longest Job				
None	88.2**	32.0	27.0	40.1
1-12 months	75.6**	36.9	14.4**	45.0
> 12 months	80.4**	40.5	19.2**	48.6
Weeks Worked Year Prior to Enrollment				
None	81.8**	35.1	20.6**	43.2
Five	80.4**	36.8	19.2**	44.9
Ten	79.0**	38.6	17.8**	46.7
Job Training Year Prior to Enrollment				
Less than 8 weeks	78.7**	37.9	17.5**	46.0
Eight or more weeks	80.1**	46.9	18.9	55.0

TABLE IV.5 (Continued)

Subgroup	Months 1-9 Experimental-Control Differential	Months 1-9 Control Group Mean	Months 10-18 Experimental-Control Differential	Months 10-18 Control Group Mean
Welfare and Food Stamp Bonus Value				
None	83.8**	42.0	22.6**	50.1
Some	74.5**	35.8	13.3**	43.9
Dependents[a/]				
None	71.1**	42.9	9.9*	51.0
One or more	90.8**	32.5	29.6**	40.6
Incarcerated				
Never	83.1**	41.4	21.9**	49.5
Within 12 months of enrollment	81.2**	30.1	20.0**	38.2
Longer ago than 12 months	74.7**	42.7	13.5**	50.8
Number of Arrests				
None	78.1**	39.9	16.9**	48.0
Four	78.5**	39.3	17.3**	47.4
Nine	79.0**	38.6	17.8**	46.7
Prior Use of Drugs				
No regular use	67.1**	37.6	5.9	45.7
Regular use	80.2**	38.8	19.0**	46.9

NOTE: These data are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history. The equation used to estimate site effects did not permit variation in results among other subgroups, and vice versa.

[a/] Estimated program effects vary significantly between the subgroups.

*Experimental-control difference for the subgroup is statistically significant at the 10 percent level.

**Experimental-control difference for the subgroup is statistically significant at the 5 percent level.

across sites and between and among other subgroupings. For the most part, however, the differences in results across the various subgroups are not statistically significant.

The site-specific results were quite similar to one another for the first 9-month period. But during the second 9-month period the differences became more marked. The largest differences were observed for the Chicago and Oakland samples--where experimentals worked 29 and 26 hours per month more, respectively, than their control group counterparts.[1/] The lower than average differential in Jersey City was due in part to the greater employment among control group members there as compared with other sites. This is somewhat surprising since area unemployment was considerably higher in Jersey City than other sites during the period under study. However, a more important factor in determining the low differential in employment between experimentals and controls in Jersey City during these latter months may be the significantly higher percentage of experimentals than controls (36 versus 6 percent) who received unemployment compensation. (Except for Jersey City, receipt of unemployment compensation was uniformly low and did not differ significantly between experimentals and controls.)

We also considered whether site start-up difficulties would have any impact on the effectiveness of the program. However, unlike some of the target groups, there was no difference in results for ex-addicts based upon the length of time the program was operating when an individual enrolled.

[1/] By the 16-to-18-month period, only the differentials for the Chicago and Oakland samples remained positive (12 and 13 hours per month, respectively), though not statistically significant.

Nor did the findings vary significantly among other subgroups of the ex-addict sample, with one exception: the experimental-control differential in hours worked was significantly larger for those with one or more dependents than for those with none.

3. Patterns of Employment

At the end of the first 9-month period, 76 percent of the experimental group was in the labor force (57 percent employed), compared with 64 percent of the control group (30 percent employed); 19 and 34 percent of each group, respectively, were unemployed. By the end of the second 9-month period, however, both labor force participation and the distribution of participants between those working and those looking for work were quite similar for experimentals and controls: 65 percent of experimentals and 62 percent of controls were in the labor force; 29 and 32 percent, respectively, were employed; and 36 percent of the experimentals were unemployed, compared with 30 percent of controls.

The data in Table IV.6 compare the employment experiences of experimentals after they left Supported Work to the experiences of control group members since their enrollment in the demonstration. Nearly all experimentals had left Supported Work during the period under study and, of those who left, 50 percent found nonprogram employment. In comparison, 65 percent of controls held a job at some point during the 18-month period. Adjusting for the number of weeks experimental group members were available for nonprogram jobs (i.e., the period after they left Supported Work) yields the result that experimentals worked an average of 26 percent of the available months and controls worked 29 percent of them. Among those with jobs, experimentals worked an average of 51 percent of the weeks and controls worked 44 percent.

TABLE IV.6

NONPROGRAM EMPLOYMENT EXPERIENCES, EXPERIMENTALS AND CONTROLS, EX-ADDICT SAMPLE

	Months 1-18	
	Experimentals	Controls
Percentage Who Left Supported Work	98.2	n.a.
Average Month of Supported Work Termination	7.3[a]	n.a.
Percentage With Nonprogram Employment[b]	49.2	65.1
Of Those With Nonprogram Employment:		
Percentage who found job with help of		
Supported Work	18.8	n.a.
Employment Service	3.6	9.8
Percentage of Available Weeks Employed	51.1	43.9
Hours Worked Per Week[c]	18.9	15.3
Average Hourly Wages[d]	$4.33	$4.10
Percentage With CETA or WIN Jobs	10.1	11.2
Percentage With CETA, WIN, or Government Jobs	17.3	20.5

[a] Seventeen percent of the sample left the program more than once. On average, individuals were in Supported Work 6.1 months at the time of their first termination; the overall average length of stay was 6.8 months.

[b] The average number of spells of continuous employment was 1.3 for experimentals and 1.5 for controls.

[c] For experimentals, the average hours worked per week were calculated on those weeks since leaving the program.

[d] These wage rates are calculated as the average, for all individuals who had jobs, of their total earnings divided by the number of hours worked.

n.a. = not applicable.

It was also true that, of those individuals who held nonprogram jobs during this period, those in the experimental group exhibited a slightly more favorable pattern of employment: they were employed, as we have just seen, a higher percentage of the weeks available to them (51 versus 44 percent); they worked a few hours more per week (19 versus 15); and they commanded somewhat higher wage rates ($4.33 versus $4.10). The percentage of the experimentals who held jobs that were subsidized (between 10 and 17 percent) was slightly smaller than the percentage of the control group (between 11 and 21 percent).

These employment results for the ex-addict sample suggest that, even though, during this 18-month period, experimentals worked 873 hours and earned $2,304 more than controls, Supported Work may not have significant long-run effects on the employment experiences of these participants. However, it is unclear what the program's effects for ex-addicts might have been if the demonstration had been conducted in a different economic climate and/or in the absence of the SUA program. The longer-term effects for the ex-addict target group may thus change because economic conditions may change and because experimentals ultimately will have exhausted their SUA benefits.

B. WELFARE RECEIPT AND OTHER SOURCES OF INCOME AND IN-KIND BENEFITS

At enrollment, approximately 40 percent of the ex-addict sample was receiving welfare. Of those receiving benefits, about two-thirds received General Assistance (GA);[1/] a quarter received AFDC; and the

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[1/] General Assistance is a state-funded welfare program aimed at the needy who do not qualify for federally funded programs such as AFDC or SSI. Eligibility criteria and benefit levels vary widely from state to state. The program serves a primarily urban population: in 1974 half the nation's GA recipients were located in only 17 cities (Levitan, 1976).

remainder received other types of welfare, including Supplemental Security Income (SSI).[1/]

1. Overall Experimental-Control Differences

Data on the percentages receiving income from various sources and the average amounts received are presented in Table IV.7. During the first 9-month period, when most experimentals were participating in Supported Work, 95 percent of the experimentals in the ex-addict sample, as compared with 47 percent of controls, reported earned income. By the 16-to-18-month period, these percentages had shrunk to only 37 percent for experimentals and 40 percent for controls. This decline in earnings for experimentals was accompanied by a substantial increase in unemployment compensation (UC). During the first 9-month period, 2 percent of experimentals received UC, versus 7 percent of controls; during the second 9-month period, 16 percent of the experimentals received UC, compared to only 4 percent of the controls.[2/]

Between 40 and 50 percent of the control group received welfare and food stamps during each of the two 9-month periods. During the first nine months, a significantly lower percentage of experimentals than controls received income from these sources: 30 percent received welfare and 37 percent received food stamps. During the second nine months, however, as more experimentals became unemployed, the differentials narrowed and that for food stamp receipt was no longer statistically significant.

[1/] Supplemental Security Income is a federally funded program to serve the aged, blind, and disabled poor. In 1975, the monthly payment was $158 per month for an individual and $237 per month for couples (Levitan, 1976).

[2/] Most of the ex-addict experimentals receiving UC were in Jersey City.

TABLE IV.7

INCOME RECEIVED FROM VARIOUS SOURCES, EXPERIMENTALS AND CONTROLS,

EX-ADDICT SAMPLE

	Months 1-9			Months 10-18			Months 16-18		
	Experimentals	Controls	Experimental-Control Differential	Experimentals	Controls	Experimental-Control Differential	Experimentals	Controls	Experimental-Control Differential
Percentage Receiving Income from									
Earnings	94.5	46.6	47.9**	64.4	50.0	14.4**	36.9	39.5	-2.6
Unemployment compensation	2.0	7.4	-5.4**	16.1	4.3	11.8**	14.3	3.0	11.3**
Welfare[a/]	30.2	50.9	-20.7**	42.0	48.2	-6.2*	38.9	44.1	-5.2
Food stamps	37.4	44.1	-6.7**	40.3	43.2	-2.9	38.4	40.3	-1.9
Other unearned income[b/]	3.7	6.1	-2.4	2.0	4.1	-2.1	2.0	3.8	-1.8
Average Monthly Income from All Sources	$431.8	$287.6	$144.2**	$381.0	$329.7	$51.3**	$369.2	$344.6	$24.6
Earnings	351.8	150.7	201.1**	249.6	194.3	55.3**	207.3	208.0	-0.7
Unemployment compensation	3.4	11.0	-7.6**	28.7	8.2	20.5**	44.4	9.0	35.4**
Welfare[a/]	47.2	94.0	-46.8**	76.4	89.2	-12.8*	78.8	87.6	-8.8
Food stamp bonus value	16.1	20.4	-4.3**	19.6	22.5	-2.9	20.1	22.5	-2.4
Other unearned sources	7.2	8.6	-1.4	2.9	5.0	-2.1	3.7	5.4	-1.7

NOTE: The data are regression adjusted estimates that control for differences in income receipt from various sources due to age, sex, race, education prior work and job training experiences, household composition, prior receipt of income from source, site, length of site operation, drug use, and criminal history.

[a/] Welfare includes AFDC, GA, SSI and other unspecified welfare income.

[b/] Other unearned income includes Social Security, pensions, alimony, child support.

*Statistically significant at the 10 percent level on a two-tailed test.

**Statistically significant at the 5 percent level on a two-tailed test.

The distribution of the amounts received from each of the various sources closely follows the patterns displayed for the percentage of the sample receiving it. The lower portion of Table IV.7 shows a decline in total income received by experimentals from $432 per month in the first 9-month period to $381 per month in the second 9-month period. This decline was due primarily to a $100 decrease in monthly earnings, which was only partially offset by a $25 per month increase in unemployment compensation and a $33 increase in welfare income and food stamp bonuses. Total income for controls increased from $288 per month in the first 9-month period to $330 in the second, largely because of a $44 increase in monthly earnings. While the experimental-control differences in total income, earned income, and unemployment compensation were large and significant over the second 9-month period as a whole, experimentals' earnings fell over time and, by the 16-to-18-month period, only the UC differential ($35 per month) remained significant.

The resulting pattern of change in welfare income and food stamp receipt is depicted in Figure IV.2. Over the full 18-month period, experimentals received an average of about $600 less from these two sources than did controls.

Throughout the 18-month period, income from other unearned sources was limited for both experimentals and controls, varying between $3 and $9 a month, with no statistically significant differences between the two groups.

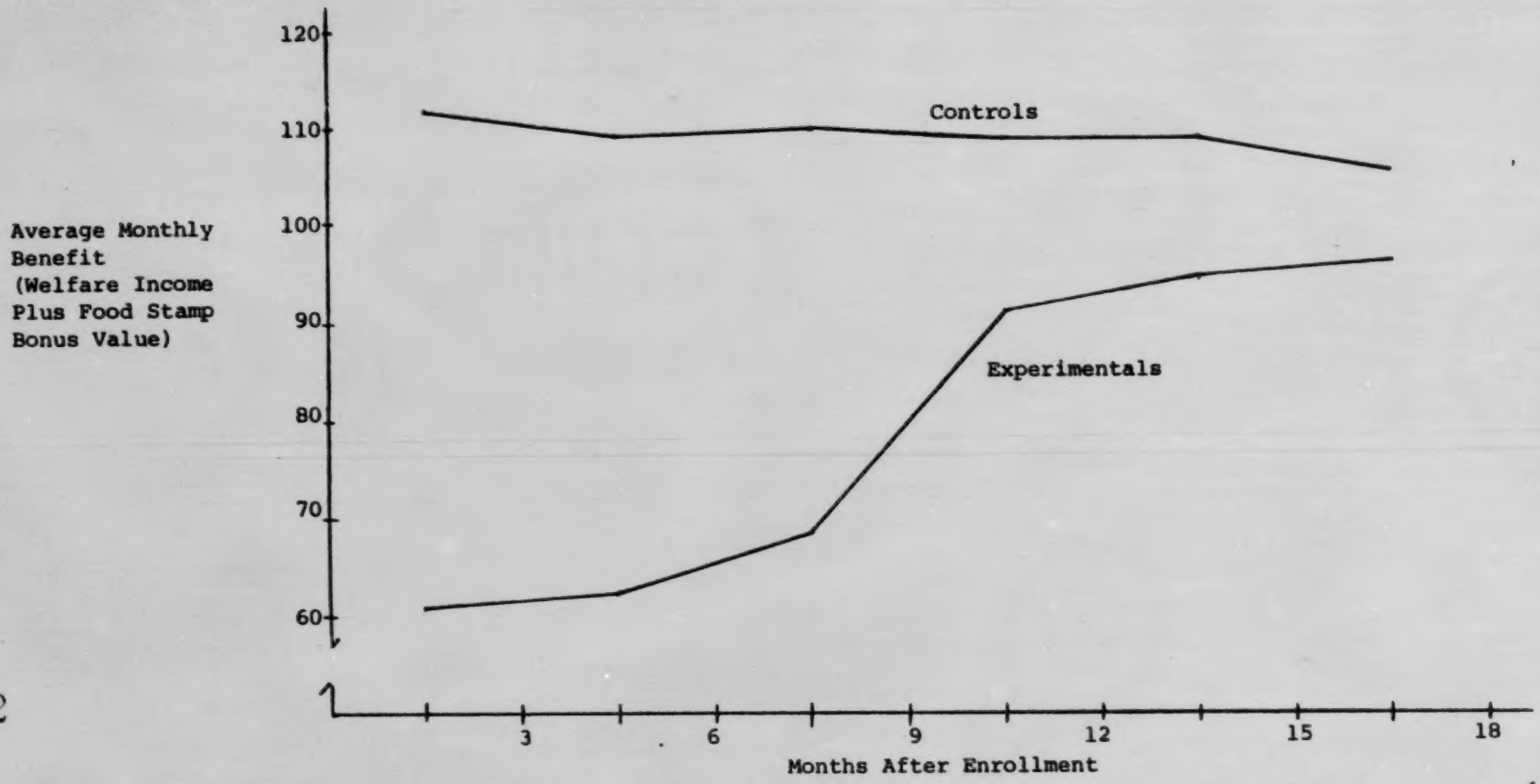
Because of the higher income of experimentals, it might be expected that welfare and other unearned income of other household members would be lower for the experimental than for the control group. However, this did not appear to be the case. About 12 percent of both experimentals

FIGURE IV.2

AVERAGE MONTHLY WELFARE INCOME PLUS FOOD STAMP BONUSES RECEIVED,

EXPERIMENTALS AND CONTROLS,

EX-ADDICT SAMPLE



Note: All experimental-control differences are statistically significant at the 5 percent level.

and controls reported that other household members received welfare and 9 percent of both groups reported other forms of unearned income; the average amount of welfare income of other household members was about $28 per month and income from other sources averaged only $3 per month.

There were no statistically significant experimental-control differentials for the receipt of such in-kind benefits as Medicaid and public housing. A slightly smaller percentage of experimentals than controls had Medicaid cards (34 percent versus 44 percent in the first 9-month period and 38 percent versus 41 percent in the second 9-month period), but the average duration of card ownership was about 3 months for both groups. About 16 percent of both experimentals and controls lived in public housing, paying an average of $84 per month for rent.[1/]

2. Differences in Welfare Results Among Sites and Subgroups

Table IV.8 presents, for the first and second 9-month periods after enrollment, regression adjusted experimental-control differences in the value of welfare and food stamp bonuses for subgroups of the ex-addict sample.

The combined value of welfare payments and food stamps varied significantly from site to site. In both periods, the largest experimental-control differential occurred, quite predictably, in Chicago, where controls had the highest receipt and the experimental-control differential for the number of hours worked was the highest. The smallest differential during the first 9-month period was in Jersey City, and by the end of the second 9-month period that differential had

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[1/] Less than 2 percent of both experimentals and controls received a rent subsidy.

TABLE IV.8

THE VALUE OF WELFARE AND FOOD STAMP RECEIPTS, EXPERIMENTAL-CONTROL DIFFERENTIALS, EX-ADDICT SUBGROUPS

Subgroup	Months 1-9		Months 10-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Total	-45.7**	110.4	-14.7**	108.2
Site[a/]				
Chicago	-80.5**	132.7	-50.4**	130.5
Jersey City	-21.7**	81.5	4.9	79.3
Oakland	-66.0**	107.1	-37.8	104.9
Philadelphia	-47.0**	128.9	-10.2	126.7
Program Age at Time of Enrollment				
6 months	-54.8**	118.7	-23.9*	116.5
15 months	-46.5**	108.4	-15.5**	106.2
Program Eligibility				
Eligible	-49.1**	113.2	-18.1**	111.0
Ineligible	-44.1**	99.1	-13.1	96.9
Length of Longest Job				
None	-27.6	109.9	3.3	106.8
1-12 months	-54.9**	120.6	-24.0**	118.4
More than 12 months	-45.0**	103.2	-14.0	101.0
Weeks Worked Year Prior to Enrollment				
None	-51.2**	111.3	-20.3**	109.1
Five	-49.7**	110.9	-18.8**	108.7
Ten	-48.2**	110.4	-17.2**	108.2

TABLE IV.8 (Continued)

Subgroup	Months 1-9 Experimental-Control Differential	Months 1-9 Control Group Mean	Months 10-18 Experimental-Control Differential	Months 10-18 Control Group Mean
Job Training Year Prior to Enrollment[a]				
Less than 8 weeks	-53.5**	115.0	-22.5**	112.8
Eight or more weeks	2.7	64.2	33.6	62.0
Welfare and Food Stamp Bonus Value[a]				
None	-33.5**	67.6	-2.5	65.4
Some	-61.1**	148.4	-30.1**	146.2
Dependents				
None	-35.3**	88.3	-4.3	86.1
One or more	-67.6**	143.5	-36.6**	141.3
Incarcerated[a]				
Never	-26.7**	98.5	4.2	96.3
Within 12 months of enrollment	-34.9**	89.7	-4.0	87.5
Longer ago than 12 months	-70.1**	132.3	-39.1**	130.1
Number of Arrests				
None	-54.7**	114.8	-23.7**	112.6
Four	-51.2**	112.6	-20.2**	110.4
Nine	-46.8**	109.0	-15.9**	107.7
Prior Use of Drugs				
No regular use	-56.7**	125.8	-25.7	123.6
Regular use	-46.6**	108.7	-15.6**	106.5

NOTE: The data are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history. The equation used to estimate site effects did not permit variation in results among other control variables, and vice versa.

[a] Estimated program effects vary significantly among the subgroups.

*Experimental-control difference for the subgroup is statistically significant at the 10 percent level.

**Experimental-control difference for the subgroup is statistically significant at the 5 percent level.

disappeared. This is consistent with the experimental-control earnings difference in Jersey City being small relative to that of other sites and their unemployment compensation difference being very high ($52 per month on average) during the second 9-month period.

Experimental-control group differences in welfare income plus food stamp bonuses also varied significantly among other subgroupings of the ex-addict sample. Those with fewer than eight weeks of job training, those who received welfare prior to enrollment, and those with some period of incarceration in the past experienced, on average, significantly larger reductions in their welfare benefits relative to comparable control group members than did the other groups.

C. DRUG USE

1. Overall Experimental-Control Differences

Table IV.9 contains data on the proportion of experimentals and controls in the ex-addict sample who reported using various drugs, controlling for differences in other characteristics of the sample.[1/] These data suggest that Supported Work had little, if any, impact on drug use. During both the first and second 9-month periods, the percentages of experimentals reporting use of any drugs (other than marijuana or alcohol)[2/] or using heroin, other opiates, cocaine, or marijuana were not significantly different from the percentages of controls using such drugs. Similarly, the

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[1/] Respondents to an early version of the 9-month interview were omitted from this analysis because of missing data on certain drug-use variables. A higher proportion of these early enrollees reported drug use than the average of this sample. However, since experimentals and controls were not treated differently in this exclusion process, the results reported here will be unbiased.

[2/] These drugs include heroin, methadone, other opiates, cocaine, amphetamines, barbiturates, and psychedelics.

TABLE IV.9

REPORTED DRUG USE, EXPERIMENTALS AND CONTROLS,

EX-ADDICT SAMPLE

Drug	Months 1-9			Months 10-18		
	Experimentals	Controls	Experimental-Control Differential[a]	Experimentals	Controls	Experimental-Control Differential[a]
Any Drug (other than marijuana)						
Percentage reporting any use	33.8	33.9	-0.1	28.0	28.7	-0.7
Heroin						
Percentage reporting any use	18.9	20.1	-1.2	13.3	14.8	-1.5
Percentage reporting daily use	n.a.	n.a.	n.a.	4.0	6.8	-2.8
Opiates, Other than Heroin[b]						
Percentage reporting any use	7.7	10.3	-2.6	5.6	4.7	0.9
Cocaine[b]						
Percentage reporting any use	16.6	12.8	3.8	14.5	12.2	2.3
Marijuana						
Percentage reporting any use	64.1	67.0	-2.9	64.2	64.1	0.1
Percentage reporting daily use	n.a.	n.a.	n.a.	23.5	23.9	-0.4
Alcohol						
Percentage reporting daily use	13.4	15.9	-2.5	15.4	11.6	3.8

TABLE IV.9 (Continued)

NOTE: The data are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experiences, household composition, prior receipt of income from other sources, site, length of site operation, prior drug use, and criminal history. These estimates were calculated using ordinary least square (OLS) techniques. Although probit is a more appropriate estimation technique when the dependent variable takes only two values, results evaluated at the mean have been shown, in general, to be quite similar for the two estimation procedures. We chose to use OLS techniques because we planned to evaluate the experimental-control group differences at the mean values of the independent variables and because this information is more readily available from the standard output from OLS regression packages.

a/ None of the experimental-control differences was statistically significant at the 10 percent level.

b/ Daily use of other opiates and cocaine was reported by less than 5 percent of the ex-addict sample and so are not included in this table.

n.a. = not available.

proportions of the two groups reporting daily use of marijuana and alcohol were not significantly different from one another for either period.

A comparison of the reported drug use for the first 9-month period with that for the second, however, did reveal an overall decline in drug use (except marijuana and alcohol) by both experimentals and controls. By far the largest source of this reduction was the decrease in reported use of heroin. Use of heroin dropped from 19 and 20 percent of experimentals and controls, respectively, in the first period, to 13 and 15 percent in the second. A partial explanation for this decline is the national decline in heroin use during this period (Dupont, 1978). However, some of the decline may be attributable to increased under-reporting of drug use by sample members in successive interviews.[1/]

Potentially important outcome variables to consider for the ex-addict sample are daily use of heroin and the duration of use of heroin and cocaine.[2/] However, the percentages of both experimentals and controls who reported using heroin daily were low (4 and 7 percent for the two groups, respectively) and not significantly different from one another. Similarly, there was no significant difference in the average number of months members of the experimental and control groups used either heroin or cocaine.

[1/] An analysis of the sources of decline in reported heroin use performed on a sample available earlier than this one suggested that both of these factors were important: some of the reduction in reported drug use was related to the date an interview regardless of type was administered; there was some residual decline, part of which may be attributed to increased under-reporting.

[2/] Less than 5 percent of the sample reported daily use of cocaine. Thus, we did not analyze this outcome measure.

2. Differences in Results Among Sites and Subgroups of the Sample

Although there appear to be few overall differences between experimentals and controls, the aggregated results may mask differences in the effectiveness of the program that vary across sites or according to the characteristics of individuals in the sample. Table IV.10 contains estimates of (regression adjusted) differences in the proportions of experimentals and controls using heroin, for each site and also for subgroups defined by length of site operation, age, employment history and job training experience, criminal history, and drug use history.[1/]

The results varied significantly between Oakland and the other sites. Although there was no overall difference in heroin use between experimentals and controls in either time period, in both time periods experimentals in Oakland were significantly less likely than their control group counterparts to use heroin. This large differential in Oakland resulted primarily from the high use rate among the control group (between 48 and 58 percent of the group). The proportion of experimentals using heroin in Oakland also tended to be above average, even if significantly less than the proportion of controls using heroin there. (It should be noted that there were only 40 ex-addicts at the Oakland site.)

It is also noteworthy that experimentals older than 35 were significantly less likely than controls of similar age to report having used heroin during the second 9-month period, although there was no significant difference between experimentals and controls in other age groups. While the results do not vary significantly with the length of

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[1/] Similar comparisons were made of the percentages of experimentals and controls using any drug. However, since these results were so similar to those for use of heroin, and since heroin use was so prevalent among this target group prior to enrollment, only the estimates of the impact of Supported Work on heroin use are presented.

TABLE IV.10

PERCENTAGE REPORTING USE OF HEROIN, EXPERIMENTAL-CONTROL DIFFERENTIALS, EX-ADDICT SUBGROUPS

Subgroup	Months 1-9		Months 10-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Total	-1.2	20.1	-1.5	14.8
Site[a]				
Chicago	6.3	16.3	5.7	15.7
Jersey City	-0.2	9.2	-4.3	10.8
Oakland	-40.2**	58.3	-24.3**	48.0
Philadelphia	-0.6	28.1	0.6	12.7
Length of Site Operation at Time of Enrollment[a]				
6 months	9.4	23.4	9.6	14.5
15 months	-2.2	19.8	-2.5	14.8
Eligibility Status				
Eligible	-2.6	21.6	-0.9	15.9
Ineligible	4.6	13.5	-3.7	10.3
Age at Enrollment[b]				
Younger than 21	1.1	11.6	5.2	2.7
21 through 34	0.4	20.0	1.0	14.1
35 or older	-13.4	25.5	-21.9**	27.0
Length of Longest Job				
None	-3.3	14.4	-8.9	25.4
1-12 months	-5.9	22.9	-7.9*	21.6
More than 12 months	2.3	18.6	3.7	9.1

TABLE IV.10 (Continued)

Subgroup	Months 1-9 Experimental-Control Differential	Months 1-9 Control Group Mean	Months 10-18 Experimental-Control Differential	Months 10-18 Control Group Mean
Job Training Year Prior to Enrollment				
Less than 8 weeks	-0.4	18.9	-1.3	14.6
Eight or more weeks	-9.5	32.5	-2.8	17.4
Number of Arrests				
None	-3.2	22.5	-4.2	16.4
Four	-2.2	21.3	-2.8	15.6
Eight	-1.2	20.1	-1.4	14.8
Parole/Probation Status				
Not on parole/probation	1.6	17.6	-1.2	13.8
On parole/probation	-6.0	24.4	-1.9	16.4
Drug Treatment				
Not in treatment program	-4.6	20.6	-10.8	18.4
In treatment program	-0.9	20.1	-0.5	14.4

NOTE: The data are regression adjusted estimates that control for age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history. The equation to estimate site differences did not include status interacted with the other subgroup characteristics and vice versa. These estimates were calculated using ordinary least square (OLS) techniques. Although probit is a more appropriate estimation technique when the dependent variable takes only two values, results evaluated at the mean have been shown, in general, to be quite similar for the two estimation procedures. We chose to use OLS techniques because we planned to evaluate the experimental-control group differences at the mean values of the independent variables and because this information is more readily available from the standard output from OLS regression packages.

[a] Estimated program effects vary significantly among the subgroups during both 9-month periods.

[b] Estimated program effects vary significantly among the subgroups during the second 9-month period.

*Experimental-control difference for the subgroup is statistically significant at the 10 percent level.

**Experimental-control difference for the subgroup is statistically significant at the 5 percent level.

the individual's longest job, a significant experimental-control difference was observed for the subgroup whose longest job tenure was less than a year, but not for the other subgroups. For all of the subgroup comparisons where program effects were observed, the proportion of experimentals who reported using heroin dropped considerably over time, while use among the controls in these subgroups remained relatively high (above 20 percent) and constant over both 9-month periods.[1/]

Table IV.10 shows that the results did not vary significantly with any of the other individual characteristics considered, including number of arrests, job training, parole/probation status, and technical eligibility for Supported Work.[2/]

D. CRIMINAL ACTIVITY

1. Measures of Criminal Activity

Involvement in criminal activity can be characterized by contacts with the legal justice system--arrests, convictions, incarceration--and by admissions of involvement. Admissions of crime are expected to be the least reliable measures, and there is no way to verify these data. Conviction, incarceration, and arrest data all have the shortcoming of failing to measure actual participation in crime; these data also can vary considerably among jurisdictions. Although we report results from interview data on convictions, periods

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[1/] Similar comparisons of program effectiveness in reducing the use of any drug revealed that only Oakland showed significantly less usage among experimentals than controls during the first 9-month period (again, due to the high proportion of users among the control group), and this effect disappeared in the later period.

[2/] These same findings occurred when the effect of Supported Work on use of any drug was examined. Program effects were statistically significant only for those whose longest job was less than 12 months. They were fairly large but not significant for those over 35 years old or not in drug treatment prior to enrollment, and small and insignificant for other individuals.

of incarceration, and participation in crime, our major focus is on three measures of post-enrollment arrest history as reported on the interviews: (1) the percentage of the sample who reported having been arrested, (2) the average number of arrests per person, and (3) how soon after enrollment an individual was arrested.[1/] One reason we feel confident about this focus is that a comparison between interview data and police records on arrests for a sample of 429 Supported Work experimentals and controls enrolled in Oakland and San Francisco (Schore et al., 1978) has revealed that, while a general under-reporting of criminal activity was found, experimentals and controls under-reported post-enrollment arrests by a similar amount, and thus our tests of whether Supported Work led to a reduction in arrests will be valid.[2/]

2. Overall Experimental-Control Differences

The data in Table IV.11 suggest that ex-addict experimentals engage in significantly less criminal activity than do controls. Thirty-six percent of the controls reported having been arrested during the 18 months following enrollment, as opposed to 25 percent of the experimentals. The results for the average number of arrests per person and the number of months until the first arrest are similarly favorable: experimentals reported significantly fewer arrests, and arrest dates that were, on average, a month later than dates reported by controls.

[1/] The focus on these measures is not predicated on the assumption that an arrest indicates guilt, but rather on the notion that arrests are highly correlated with participation in criminal activities.

[2/] In order to generalize the findings of this arrest data validation study to the entire Supported Work sample, police records for respondents in Hartford are currently being analyzed.

TABLE IV.11

INDICATORS OF CRIMINAL ACTIVITY, EXPERIMENTALS AND CONTROLS,

EX-ADDICT SAMPLE

	Months 1-9			Months 10-18			Months 1-18		
	Experimentals	Controls	Experimental-Control Differential	Experimentals	Controls	Experimental-Control Differential	Experimentals	Controls	Experimental-Control Differential
Arrests									
Percentage with any arrests	16.5	21.7	- 5.2*	12.7	19.6	- 6.9**	24.7	35.9	-11.2**
Number of arrests	0.21	0.28	- 0.07	0.14	0.25	- 0.11**	0.35	0.52	- 0.18**
Months to first arrest	--	--	--	--	--	--	15.4	14.3	1.1**
Percent with robbery arrest	1.1	5.5	- 4.4**	0.8	3.5	- 2.7**	2.1	8.8	- 6.7**
Number of robbery arrests	0.01	0.06	- 0.05**	0.01	0.04	- 0.03**	0.02	0.10	- 0.08**
Percent with drug arrests	2.2	4.7	- 2.5*	1.5	5.2	- 3.7**	3.6	8.8	- 5.2**
Convictions									
Percentage convicted	8.3	10.0	- 1.7	5.3	9.2	- 3.9*	11.9	18.0	- 6.1**
Incarceration									
Percentage incarcerated	11.5	10.0	1.4	11.3	16.6	- 5.3**	15.6	19.5	- 3.9
Number of weeks incarcerated	1.8	2.0	- 0.2	2.1	3.6	- 1.5**	3.9	5.6	- 1.7*

NOTE: The data are regression adjusted estimates that control for differences in crime measures due to age, sex, race, education, prior work and job-training experience, household composition, length of site operation, prior drug use, and criminal history. These estimates were calculated using ordinary least square (OLS) techniques. Although probit is a more appropriate estimation technique when the dependent variable takes only two values, results evaluated at the mean have been shown, in general, to be quite similar for the two estimation procedures. We chose to use OLS techniques because we planned to evaluate the experimental-control group differences at the mean values of the independent variables and because this information is more readily available from the standard output from OLS regression packages.

*Statistically significant at the 10 percent level on a two-tailed test.

**Statistically significant at the 5 percent level on a two-tailed test.

Experimental-control differences in robbery and drug arrest rates are particularly noteworthy, since robbery is a high-cost crime to society and drug-related crimes might be expected to be quite prevalent among this group. Significantly fewer experimentals than controls reported being arrested for robbery (2 percent versus 9 percent). Similarly, only 4 percent of experimentals compared with 9 percent of controls reported an arrest on drug charges during the 18-month period.

In addition to the favorable results related to arrests, alternative indicators of criminal activity also suggest that Supported Work tended to reduce crime among experimentals. Over the full 18-month period, 18 percent of the control group reported having been convicted of an offense, compared with 12 percent of the experimental group. Furthermore, experimentals reported less incarceration than did controls during this period: 20 percent of controls, compared with 16 percent of experimentals, were incarcerated and, of those who were incarcerated, controls spent an average of four weeks longer in prison or jail than did experimentals.

Finally, we examined self-reported data concerning the commission of crime and the receipt of illegal income. About 25 percent of both the experimentals and the controls reported having committed a crime, and 18 percent of both groups claimed to have had illegal income in each of the 9-month periods.

3. Differences in Results Among Sites and Subgroups of the Sample

Table IV.12 shows experimental-control differences in the percentage arrested for different subsamples during the 18-month period. The most noteworthy program results were observed for the Oakland sample and for the older respondents. The experimental-control differential for the

TABLE IV.12

PERCENTAGE ARRESTED, EXPERIMENTAL-CONTROL DIFFERENTIALS,

EX-ADDICT SUBGROUPS

Subgroup	Months 1-18 Experimental-Control Differential	Months 1-18 Control Group Mean
Total	-11.2**	35.9
Site[a/]		
Chicago	-7.4	28.8
Jersey City	-7.8	35.9
Oakland	-35.0**	59.4
Philadelphia	-13.1**	35.9
Length of Site Operation at Time of Enrollment		
6 months	-23.3**	41.5
15 months	-10.2**	35.2
Eligibility Status		
Eligible	-8.6**	35.6
Ineligible	-22.7**	36.4
Age at Enrollment		
Younger than 21	-8.1	35.4
21 through 34	-10.2**	37.0
35 or older	-22.5**	28.3
Length of Longest Job		
None	-6.8	17.8
1-12 months	-10.2*	39.6
More than 12 months	-12.7**	34.6

TABLE IV.12 (Continued)

Subgroup	Months 1-18 Experimental-Control Differential	Months 1-18 Control Group Mean
Job Training Year Prior to Enrollment		
Less than 8 weeks	-11.0**	35.4
Eight or more weeks	-16.3	40.2
Number of Arrests		
None	-7.4	29.3
Four	-9.4**	32.5
Eight	-11.4**	35.7
Parole/Probation Status		
Not on parole/probation	-9.7**	34.5
On parole/probation	-14.4**	38.0
Months Since Incarcerated[a/]		
Never incarcerated	-20.9**	38.5
Less than 12 months	-3.6	41.1
12 months or more	-10.2*	30.0

NOTE: The data are regression adjusted estimates that control for age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history. The equation to estimate site differences did not include status interacted with the other subgroup characteristics, and vice versa. These estimates were calculated using ordinary least square (OLS) techniques. Although probit is a more appropriate estimation technique when the dependent variable takes only two values, results evaluated at the mean have been shown, in general, to be quite similar for the two estimation procedures. We chose to use OLS techniques because we planned to evaluate the experimental-control group differences at the mean values of the independent variables and because this information is more readily available from the standard output from OLS regression packages.

[a/] Estimated program effects vary significantly among the subgroups.

*Experimental-control difference for the subgroup is statistically significant at the 10 percent level.

**Experimental-control difference for the subgroup is statistically significant at the 5 percent level.

target group as a whole was 11 percentage points, while among the Oakland sample, where 59 percent of the controls reported an arrest, the difference was 35 percentage points. A significant, but smaller (13 percentage points), differential was also observed for the Philadelphia sample.

Whereas the experimental-control group differential for respondents under the age of 21 was not significant, among those over 21, experimentals were significantly less likely to have been arrested: among those between 21 and 34 years old, 27 percent of experimentals were arrested, as compared with 37 percent of controls; among those over 34 years old, 6 percent of experimentals versus 28 percent of controls reported an arrest. In addition, the significant reduction in arrests among experimentals relative to controls tended to have occurred among those with no prior incarceration or no recent incarceration. Those released from jail or prison during the 12 months prior to their enrollment in Supported Work had arrest rates similar to their control counterparts. Other subgroup results, although sometimes large, were not significantly different from one another. A similar pattern of results by subgroup was observed for robbery arrests.

Overall, the criminal activity data suggest that Supported Work engenders many favorable outcomes for its ex-addict participants. All of the arrest measures indicate a significant reduction by ex-addict experimentals relative to controls: the arrest rate for experimentals was only two-thirds as high as that for controls over the entire 18-month period. These positive effects extended to arrests for specific crimes, such as robbery and drug offenses, and to conviction and incarceration rates. Supported Work seemed to have been more effective for ex-addicts in some sites than in others and it seemed to have had its greatest effects among the older participants.

CHAPTER V

FINDINGS FOR THE EX-OFFENDER SAMPLE

It was thought that the economic and peer-group support provided by the Supported Work program would help individuals make the transition from prison to employment in the regular labor market and, concurrently, reduce their participation in crime and other forms of deviant behavior. This chapter presents findings related to the program's effect for a sample of 428 ex-offender experimentals and 463 ex-offender control group members during the first eighteen months after their enrollment in the demonstration.

For the ex-offenders, as for the other target groups, the sites' mandatory graduation policies do not appear to have had an effect on length of stay in the program. Although 38 percent of the experimentals were enrolled in 18-month programs, only 19 percent stayed in the program for as long as 12 months, and the average length of stay was only 6.1 months (see Table V.1). Furthermore, as seen in Table V.1, only 15 percent of those who left the program reported that they did so for another job or to enroll in school or job training. A large portion reported having left for reasons related to their performance, and the remainder said they left for other, neutral reasons.[1/]

No significant effects were found with respect to job training and education, household composition, or housing consumption. This

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[1/] The Supported Work Management Information System data indicate that, of those ex-offenders in all sites who left Supported Work, 29 percent left for positive reasons, 55 percent for negative reasons, and 16 percent for neutral reasons (MDRC, 1978). Discrepancies between the MIS and interview data may result from differences in the time period covered and the sample considered, as well as unavoidable differences in the actual definition of these categories.

TABLE V.1

LENGTH OF PARTICIPATION IN SUPPORTED WORK AND REASONS FOR DEPARTURE, EX-OFFENDER SAMPLE

	Sites with Mandatory Graduation After 12 Months of Participation[a]	Sites with Mandatory Graduation After 18 Months of Participation[b]	Total
Percentage Still in Program at the End of Month			
Three	68.8	60.0	65.5
Six	51.5	36.6	45.9
Nine	33.9	28.3	31.8
Twelve	18.8	17.9	18.5
Fifteen	6.0	6.8	6.3
Eighteen	1.9	1.5	1.8
Average Number of Months in the Program	6.4	5.5	6.1
Percentage Who Left Supported Work:			
To take another job or to enroll in school or job training	13.2	18.1	15.0
For reasons related to poor performance	42.1	50.0	44.4
For other Reasons	45.7	31.9	40.7

[a] Chicago, Jersey City, Oakland and San Francisco. No individuals in these sites should have been in Supported Work during the 16-to-18-month period. That some report such enrollment may be due to reporting error or to Supported Work's occasional failure to terminate those whose eligibility has expired.

[b] Hartford, Newark, and Philadelphia.

chapter, thus, concentrates on employment, receipt of welfare and other income, drug use, and involvement in crime.

A. EMPLOYMENT

1. Overall Experimental-Control Differences

During the first year after enrollment, a significantly higher percentage of experimentals than controls in the ex-offender sample were employed, primarily in Supported Work jobs (see Table V.2). However, by the 13-to-15-month period, only 47 percent of the experimentals were employed compared with 43 percent of the controls, even though throughout this period 95 percent of the experimentals could still, at program operators' discretion, hold a Supported Work job. This small but not statistically significant differential in employment rates persisted through the 16-to-18-month period.

The pattern of results related to the number of hours worked by experimentals and controls is similar to that for employment rates, but the differential in the early months is proportionately larger for hours worked because those experimentals who were employed tended to work significantly more hours per month than did employed controls. For example, during the first 3-month period, the experimentals worked, on average, 144 hours per month, versus 37 for controls. The 94 percent of experimentals who were employed worked, on average, 153 hours per month and the 38 percent of controls who were employed worked, on average, 100 hours per month. As shown in Table V.3 and Figure V.1, however, the differential in hours worked virtually disappeared after the first year because a large portion of the experimentals had left Supported Work and had not found other employment. In contrast, the average number of hours that

TABLE V.2

PERCENTAGE EMPLOYED IN ANY MONTH, EXPERIMENTALS AND CONTROLS,

EX-OFFENDER SAMPLE

	Experimentals	Controls	Experimental-Control Differential	Percentage of Experimentals With Only Supported Work Jobs
Months 1-3	94.1	37.6	56.5**	90.4
Months 4-6	75.2	39.6	35.6**	60.8
Months 7-9	64.5	40.7	23.8**	45.9
Months 10-12	53.9	39.8	14.1**	29.3
Months 13-15	47.4	42.8	4.6	13.6
Months 16-18	46.4	42.8	3.6	5.1

NOTE: The data on the percentage employed are regression adjusted estimates that control for differences in employment due to age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history. These estimates were calculated using ordinary least square (OLS) techniques. Although probit is a more appropriate estimation technique when the dependent variable takes only two values, results evaluated at the mean have been shown, in general, to be quite similar for the two estimation procedures. We chose to use OLS techniques because we planned to evaluate the experimental-control group differences at the mean values of the independent variables and because this information is more readily available from the standard output from OLS regression packages.

**Statistically significant at the 5 percent level on a two-tailed test.

TABLE V.3

AVERAGE HOURS WORKED PER MONTH, EXPERIMENTALS AND CONTROLS,

EX-OFFENDER SAMPLE

	Experimentals	Controls	Experimental-Control Differential	Program Hours of Experimentals	
				Number	Percent of Total Hours
Months 1-3	144.2	37.0	107.2**	134	93
Months 4-6	115.2	49.9	65.3**	93	81
Months 7-9	95.4	46.2	49.2**	69	72
Months 10-12	76.9	50.2	26.7**	41	53
Months 13-15	62.2	58.5	3.7	16	26
Months 16-18	58.8	57.7	1.1	5	9

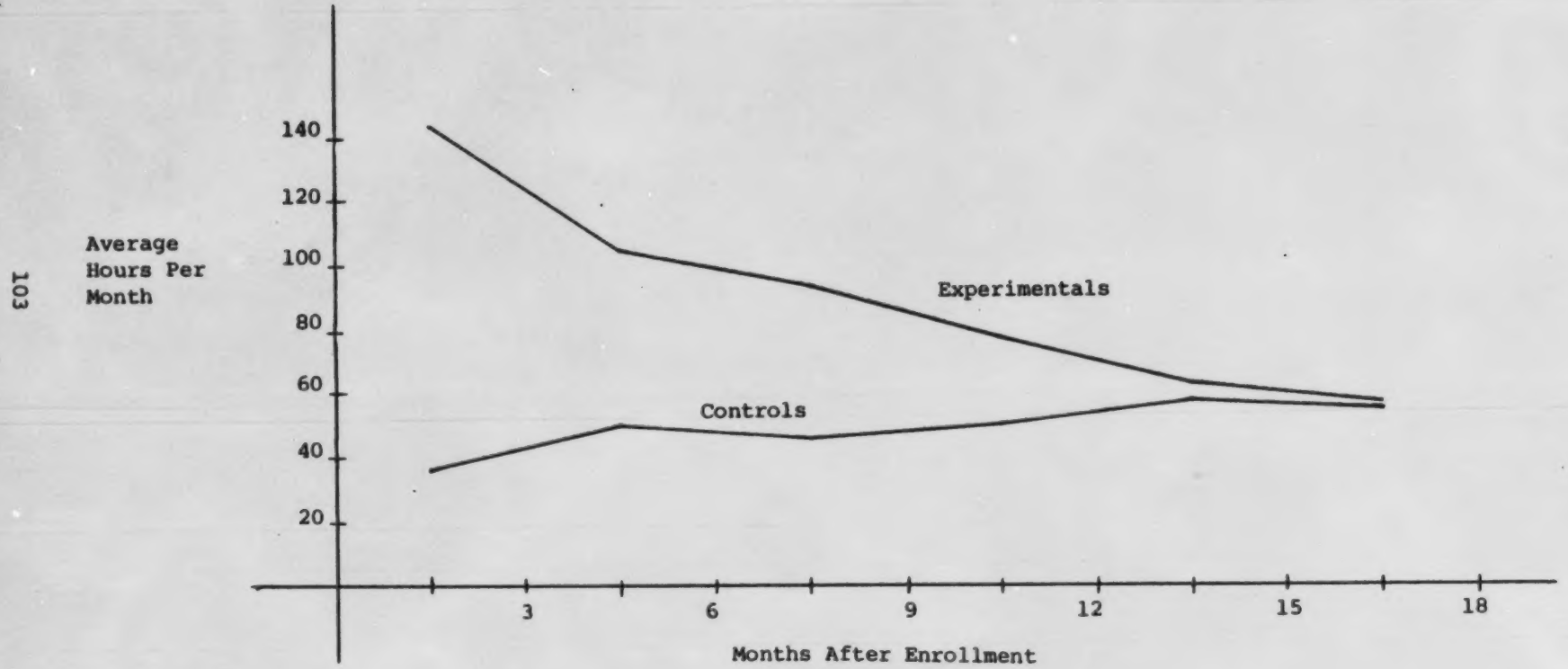
NOTE: The data on hours worked in all jobs presented in the first three columns are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history.

**Statistically significant at the 5 percent level on a two-tailed test.

FIGURE V.1

AVERAGE HOURS WORKED PER MONTH, EXPERIMENTALS AND CONTROLS,

EX-OFFENDER SAMPLE



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NOTE: Only those experimental-control differences for the first four three-month time periods are statistically significant at the 5 percent level.

controls worked had risen by over 50 percent between the first 3-month period and the start of the second year.

As with other target groups, those ex-offenders in the experimental group who did find nonprogram jobs earned higher wage rates, on average, than did controls, particularly during the later months. During the first 9-month period, experimentals earned an average of $3.96 per hour in their nonprogram jobs while controls earned an average of $3.60 per hour. By the 16-to-18-month period, however, the average hourly earnings of controls had risen to $4.04 while that of experimentals was $4.50 for nonprogram jobs ($4.45 for all jobs).[1/]

The combination of the employment rate, hours worked, and wage rate differentials resulted in the experimental and control earnings patterns presented in Table V.4. During the first three months after enrollment, experimentals earned an average of $420 per month and controls only $136 per month. Over time, the experimentals' earnings dropped, until by the 16-to-18-month period, they earned only $262 per month. Concurrently, the control group increased its earnings to $233 per month, partly through increased employment and partly as a result of an increase in their average wage rates during the last 3-month period as compared with the first 9-month period.

2. Differences in Results Among Sites and Subgroups of the Sample

These overall findings for employment-related outcomes potentially could be the net result of quite different effects for various sites

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[1/] Average hourly wage rates earned by experimentals and controls (weighted by the number of hours an individual worked) can be calculated by dividing the average monthly earnings data presented in Table V.4 by the average monthly hours worked presented in Table V.3.

TABLE V.4

AVERAGE EARNINGS PER MONTH, EXPERIMENTALS AND CONTROLS,

EX-OFFENDER SAMPLE

	Experimentals	Controls	Experimental-Control Differential	Program Earnings of Experimentals
Months 1-3	$419.8	$135.5	$284.3**	$382.9
Months 4-6	365.4	177.1	188.3**	272.9
Months 7-9	310.4	166.6	143.8**	207.2
Months 10-12	279.0	207.6	71.4**	129.3
Months 13-15	266.6	231.8	34.8	53.5
Months 16-18	261.7	233.2	28.5	19.4

NOTE: The earnings data presented in the first three columns are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history.

**Statistically significant at the 5 percent level on a two-tailed test.

and subgroupings of the sample. However, the regression adjusted subgroup differentials in hours worked presented in Table V.5 suggest that, for the most part, the results do not vary significantly between or among the subgroups considered.

There is some variance in results across sites, particularly during the second 9-month period, when most experimentals had left Supported Work; the largest differences appear in Jersey City (20 hours) and the smallest in Oakland (3 hours). However, with the exception of Philadelphia, the relatively large differences resulted from ex-offender experimentals in those sites staying in the program longer than average; thus, hours worked even in the second 9-month period included a relatively large number of program hours. This was particularly true of experimentals in Jersey City, who stayed in the program for an average of 8.6 months, as compared with a target group average of 6.1 months.[1/]

The only other exception is that the experimental-control differentials were significantly larger for those who were receiving welfare or food stamps at enrollment (34 percent of the sample) than for those who were not. This is because ex-offender controls who were receiving welfare tended to work less than other ex-offender controls in the period

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[1/] By the 16-to-18-month period there were no significant experimental-control differences for any site and, in fact, the estimated differences were negative in all sites but Philadelphia (4 hours) and San Francisco (8 hours). The sharp drop in the employment of experimentals in Jersey City may be partly attributable to UC receipt having risen from 6 percent of the sample during the first nine months to 33 percent of the sample during months 16 through 18. Overall, 10 percent of experimentals and 5 percent of controls received UC during this last 3-month period. While statistically significant, this difference is not nearly as large as that observed for the other three target groups.

TABLE V.5

HOURS EMPLOYED PER MONTH, EXPERIMENTAL-CONTROL DIFFERENTIALS,

EX-OFFENDER SUBGROUPS

Subgroup	Months 1-9		Months 10-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Total	73.9**	44.3	10.5**	55.9
Site				
Chicago	72.2**	50.2	7.8	61.8
Hartford	70.4**	40.5	12.6	52.1
Jersey City	93.9**	49.7	19.5*	61.3
Newark	68.6**	59.9	6.3	71.5
Oakland	64.0**	35.1	3.2	46.7
Philadelphia	73.8**	39.0	11.5	50.6
San Francisco	77.4**	33.8	15.3	45.4
Length of Site Operation at Time of Enrollment				
6 months	74.8**	39.8	11.4*	51.4
15 months	73.4**	45.4	10.0**	57.0
Eligibility Status				
Eligible	72.7**	44.8	9.3**	56.4
Ineligible	78.1**	42.0	14.7	53.6
Length of Longest Job				
None	69.0**	35.1	5.6	46.7
1-12 months	67.0**	44.9	3.6	56.5
> 12 months	84.5**	46.4	21.1**	58.0
Weeks Worked Year Prior to Enrollment				
None	70.2**	43.7	6.8	55.3
Five	73.3**	44.2	9.9**	55.8
Ten	76.3**	44.7	13.0**	56.3

TABLE V.5 (Continued)

Subgroup	Months 1-9 Experimental-Control Differential	Months 1-9 Control Group Mean	Months 10-18 Experimental-Control Differential	Months 10-18 Control Group Mean
Job Training Year Prior to Enrollment				
Less than 8 weeks	75.8**	41.0	12.5**	52.6
Eight or more weeks	64.1**	58.2	0.7	69.8
Welfare and Food Stamp Bonus Value[a/]				
None	65.7**	46.6	2.4	58.2
Some	88.8**	39.8	25.4**	51.4
Dependents				
None	75.2**	42.2	11.8**	53.8
One or more	67.4**	52.9	4.1	64.5
Incarcerated				
Within 12 months of enrollment	72.6**	45.3	9.2**	56.9
Longer ago than 12 months	87.2**	35.9	23.8*	47.5
Number of Arrests				
Four	74.7**	46.2	11.3**	57.8
Nine	73.9**	44.3	10.5**	55.9
Prior Use of Drugs				
No regular use	76.9**	45.0	13.5**	56.6
Regular use	69.1**	43.3	5.7	54.9

NOTE: The data are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use and criminal history. The equation used to estimate site effects did not permit variations in results among other subgroups, and vice versa.

[a/] Estimated program effects vary significantly among the subgroups.

*Experimental-control difference for the subgroup is statistically significant at the 10 percent level.

**Experimental-control difference for the subgroup is statistically significant at the 5 percent level.

after assignment, while experimentals receiving welfare at enrollment subsequently worked more than those experimentals not receiving such benefits.

3. Patterns of Employment

Supported Work led to little change in labor force participation among ex-offender experimentals relative to controls during both the ninth month after enrollment (73 percent versus 70 percent) and the eighteenth month, when about 67 percent of both groups were in the labor force. However, the percentage of experimentals employed in both months was higher than that of controls (56 percent versus 31 percent, and 38 percent versus 34 percent, respectively), and correspondingly, the percentage unemployed in both months was lower among experimentals than among controls (17 percent versus 39 percent and 29 percent versus 34 percent).

Looking at the data in Table V.6, we see that 60 percent of those experimentals who left Supported Work and 72 percent of controls found nonprogram jobs during this 18-month period. However, considering only the time that experimentals were out of Supported Work, we find that experimentals and controls worked about the same percentage of available weeks (31 and 30 percent, respectively).[1/]

Most of the ex-offender sample who found jobs found them without formal help. Only 25 percent of the experimental group reported having found their nonprogram jobs with the assistance of the Supported Work program, and even fewer (6 percent) reported having used the employment

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[1/] When we compared the employment of experimentals during the first six months after leaving Supported Work with that of controls during the first six months after enrollment, we observed little difference in their employment. Experimentals worked 7.5 weeks and controls worked 7.1 weeks.

TABLE V.6

NONPROGRAM EMPLOYMENT EXPERIENCES, EXPERIMENTALS AND CONTROLS, EX-OFFENDER SAMPLE

	Months 1-18	
	Experimentals	Controls
Percentage Who Left Supported Work	98.2	n.a.
Average Month of Supported Work Termination	6.2[a]	n.a.
Percentage with Nonprogram Employment[b]	60.4	71.8
Of Those With Nonprogram Employment:		
Percentage who found job with help of		
Supported Work	24.9	n.a.
Employment Service	5.8	9.7
Percentage of Available Weeks Employed	51.5	42.0
Hours Worked Per Week[c]	18.7	15.9
Average Hourly Wages[d]	$4.35	$3.82
Percentage With CETA or WIN Jobs	7.6	11.1
Percentage With CETA, WIN, or Government Jobs	15.7	24.0

[a] Fourteen percent of the sample left the program more than once. On average, individuals were in Supported Work 5.6 months at the time of their first termination. The overall average length of stay is 6.1 months.

[b] The average number of spells of continuous employment was 1.3 for experimentals and 1.6 for controls.

[c] For experimentals, the average hours worked per week were calculated on those weeks since leaving the program.

[d] These wage rates are calculated as the average, for all individuals who had jobs, of their total earnings divided by the number of hours they worked.

n.a. = not applicable.

service. Ten percent of controls used the employment service and the remainder found their jobs through other, generally less formal means, such as through friends. Of those with jobs, only 16 percent of the experimental group and 24 percent of the control group reported that they had jobs that might be subsidized; 8 and 11 percent of the two groups, respectively, identified their jobs specifically as CETA or WIN jobs.

As with other target groups, those experimentals who did find nonprogram jobs earned substantially higher wages on these jobs than did their control counterparts ($4.35 versus $3.82). Part of this wage rate differential may result from a lower percentage of experimentals than controls holding subsidized jobs.

These results for the ex-offender sample tend to be less favorable than those for the AFDC and ex-addict target groups: over the full 18 months, experimentals worked 765 hours and earned $2,250 more than controls. However, we are not certain of the extent to which the results are sensitive to the climate in which the demonstration was conducted. For example, although differences between experimentals and controls in unemployment compensation receipt were smaller overall for the ex-offender sample than for the other three target groups, they were nonetheless statistically significant throughout the second 9-month period, particularly among the Jersey City sample. Unemployment rates also varied considerably over the period. It will be important in the final evaluation to consider whether the results are significantly influenced by these factors. The higher average wage rate received by experimentals who found nonprogram jobs relative to controls is one indication that

Supported Work may, after all, have some longer-term employment-related benefits for ex-offenders.

B. WELFARE RECEIPT AND OTHER SOURCES OF INCOME AND IN-KIND BENEFITS

This section presents a comparison of the components of total income for ex-offender experimentals and controls over the 18-month period following enrollment in the Supported Work demonstration. At enrollment 20 percent of the ex-offenders in the sample were receiving welfare; of those, close to 70 percent received General Assistance, about 20 percent received AFDC, and the remainder received other types of welfare.

1. Overall Experimental-Control Differences

Table V.7 presents data on the percentage of the experimentals and controls receiving income from various sources and the amount of income received from each source. During the first nine months, when there was substantial participation in Supported Work, most (95 percent) of the experimental group reported earned income; only 18 percent received welfare, and 33 percent received food stamps. In comparison, during this same period, just over half of the controls had any earnings and about a third reported receiving welfare and food stamps. Very few in either group received unemployment compensation or other forms of unearned income.

Between the first and second 9-month periods, as many experimentals left Supported Work the percentage of experimentals with earnings declined to 65 percent; the percentage receiving UC benefits increased substantially to 13 percent; and the percentage of the experimentals receiving welfare benefits rose to 23 percent. The percentage of controls receiving income

TABLE V.7

INCOME RECEIVED FROM VARIOUS SOURCES, EXPERIMENTALS AND CONTROLS,

EX-OFFENDER SAMPLE

	Months 1-9			Months 10-18			Months 16-18		
	Experimentals	Controls	Experimental-Control Differential	Experimentals	Controls	Experimental-Control Differential	Experimentals	Controls	Experimental-Control Differential
Percentage Receiving Income From									
Earnings	95.2	56.3	38.9**	65.0	55.9	9.1**	46.4	42.8	3.6
Unemployment compensation	1.7	4.8	-3.1**	12.8	6.8	6.0**	9.8	4.5	5.3**
Welfare[a/]	17.5	30.7	-13.2**	23.3	29.7	-6.4**	19.3	25.3	-6.0**
Food stamps	33.1	37.3	-4.2	32.6	34.4	-1.8	30.8	29.5	1.3
Other unearned income[b/]	3.0	5.4	-2.4	3.0	5.7	-2.7*	2.4	4.4	-2.0
Average Monthly Income from All Sources	$397.5	$230.3	$167.2**	$333.3	$318.3	$15.0	$333.4	$326.7	$6.7
Earnings	365.2	159.7	205.5**	269.1	224.2	44.9**	261.7	233.2	28.5
Unemployment compensation	1.2	5.6	-4.4**	19.6	9.0	10.6**	24.0	10.0	14.0**
Welfare[a/]	17.8	36.3	-18.5**	32.4	45.4	-13.0**	32.1	47.1	-15.0**
Food stamp bonus value	11.5	14.8	-3.3*	12.1	14.8	-2.7	12.8	14.3	-1.5
Other unearned income[b/]	7.1	5.6	1.5	5.9	8.3	-2.4	6.4	7.9	-1.5

NOTE: The data are regression adjusted estimates that control for differences in income receipt from various sources due to age, sex, race, education, prior work and job training experiences, household composition, prior receipt of income from source, site, length of site operation, drug use, and criminal history.

[a/] Welfare includes AFDC, GA, SSI and other unspecified welfare income.

[b/] Other unearned income includes Social Security, pensions, alimony, child support.

*Statistically significant at the 10 percent level on a two-tailed test.
**Statistically significant at the 5 percent level on a two-tailed test.

from the various sources remained quite constant over time, however. By the 16-to-18-month period, only the differences in the percentages of experimentals and controls receiving UC (10 and 5 percent, respectively) and welfare (19 and 25 percent, respectively) were statistically significant.

As shown by the data in the lower panel of Table V.7, the composition of total income varied considerably between experimentals and controls and changed considerably among the experimental group over time. During the first nine months, experimentals had significantly higher total income than did controls ($398 versus $230 per month). Ninety percent of the experimentals' income was from earnings, compared with only 70 percent for the controls. Partially offsetting the earnings differences, however, was the $22 per month higher welfare income and food stamp bonuses received by the control group.

Over time, we observed a substantial decrease in the experimental group's income from all sources and an increase in that of the controls until by the 16-to-18-month period there was essentially no difference--experimentals received $333 per month and controls received $327. Furthermore, the components of income looked quite similar between the two groups, with two exceptions--unemployment compensation was $14 per month higher for experimentals than for controls ($24 versus $10 per month) and, offsetting this, welfare income was $15 per month lower ($32 versus $47 per month).

The only significant experimental-control difference in the receipt of in-kind benefits was in the percentage eligible for Medicaid benefits during the first 9-month period: 32 percent of controls as compared with 24 percent of experimentals reported having a Medicaid card. About 21 percent of both groups lived in public housing, and they paid about $105 per month for rent throughout the 18-month period.

It might be expected that welfare and unearned income of other members of households would be lower for experimentals than for controls. However, no statistically significant differences were observed. About 12 percent of both groups reported that other household members received welfare income and from 6 to 12 percent reported that they received other forms of unearned income.

2. Differences in Welfare Results Among Subgroups of the Sample

Table V.8 presents regression adjusted experimental-control differences in the value of welfare and food stamp bonuses for subgroups of the ex-offender sample for the first and second 9-month periods.

During both periods, receipts by controls varied considerably by site, with those in Newark receiving the lowest average monthly benefit ($36 to $44) and those in Philadelphia tending to receive the largest ($82 to $90). The experimental-control differences were smallest (or nonexistent) in those sites with the lowest general benefit levels (Chicago and Newark). Among sites other than Chicago and Newark, significant reductions in benefits occurred among the experimentals during the first 9-month period, with the largest being in Oakland and Philadelphia ($37 and $34 per month, respectively).[1/] In the second 9-month period significant differences between experimentals and controls persisted in Hartford, Oakland, and Philadelphia, which were, again, the sites with the largest control group values. Although relatively large reductions in benefits were also observed for experimentals in Jersey

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[1/] These were not the sites with the largest employment differences during the first 9-month period.

TABLE V.8

THE VALUE OF WELFARE AND FOOD STAMP RECEIPTS, EXPERIMENTAL-CONTROL DIFFERENTIALS,

EX-OFFENDER SUBGROUPS

Subgroup	Months 1-9		Months 10-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Total	-20.8**	51.3	-14.2**	59.3
Site				
Chicago	-1.1	40.9	8.7	48.9
Hartford	-27.7**	45.1	-21.3*	53.1
Jersey City	-22.1*	43.5	-18.2	51.5
Newark	-4.0	35.6	-0.1	43.6
Oakland	-36.5**	65.4	-32.5**	73.4
Philadelphia	-34.3**	82.1	-22.3*	90.1
San Francisco	-23.3*	50.2	-16.3	58.2
Length of Site Operations at Time of Enrollment				
6 months	-18.7**	47.5	-12.1	55.5
15 months	-22.0**	52.2	-15.4**	60.2
Eligibility Status				
Eligible	-20.5**	51.1	-13.9**	59.1
Ineligible	-25.2**	52.3	-18.6*	60.3
Length of Longest Job				
None	-40.0**	63.7	-33.4**	71.7
1-12 months	-16.9**	49.0	-10.3	57.0
> 12 months	-21.3**	50.4	-14.7*	58.4
Weeks Worked Year Prior to Enrollment				
None	-22.6**	52.4	-16.0**	60.4
Five	-21.5**	51.4	-14.9**	59.4
Ten	-20.3**	50.5	-13.7**	58.5

TABLE V.8 (Continued)

Subgroup	Months 1-9 Experimental-Control Differential	Months 1-9 Control Group Mean	Months 10-18 Experimental-Control Differential	Months 10-18 Control Group Mean
Job Training Year Prior to Enrollment				
Less than 8 weeks	-18.5**	49.9	-12.0**	57.9
Eight or more weeks	-33.4**	57.4	-26.8**	65.4
Welfare and Food Stamp Bonus Value[a]				
None	-4.7	28.9	1.9	36.9
Some	-53.1**	94.8	-46.6**	102.8
Dependents				
None	-18.5**	46.5	-11.9**	54.5
One or more	-32.8**	70.6	-26.2**	78.6
Incarcerated[a]				
Within 12 months of enrollment	-19.8**	47.4	-13.2**	55.4
Longer ago than 12 months	-16.0	82.5	-9.0	90.5
Number of Arrests				
Four	-22.2**	50.0	-15.6**	58.0
Nine	-22.2**	51.3	-15.6**	59.3
Prior Use of Drugs				
No regular use	-23.6**	52.0	-17.0**	60.0
Regular use	-19.9**	50.1	-13.3*	58.1

NOTE: The data are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history. The equation used to estimate site effects did not permit variation in results among other subgroups, and vice versa.

[a] Estimated program effects vary significantly among the subgroups.

*Experimental-control difference for the subgroup is statistically significant at the 10 percent level.

**Experimental-control difference for the subgroup is statistically significant at the 5 percent level.

City and San Francisco during the second period, the experimental-control differences were not significant.[1/]

The other significant experimental-control differences among the various subgroupings were that the program effects seemed to be larger among those receiving welfare at the time they enrolled in the demonstration and among those more recently released from jail or prison.

C. DRUG USE

The ex-offender target group shares many of the characteristics of the ex-addict group in that the majority of both have extensive drug use histories and criminal records. Thus, it might be expected that the effects of Supported Work on drug use of ex-offenders would be similar to those for ex-addicts.

1. Overall Experimental-Control Differences

Table V.9 contains regression adjusted data on drug use of experimentals and controls in the ex-offender sample over the two 9-month periods.[2/] The results show virtually no differences in drug use between experimentals and controls in either period. Between 28 and 29 percent of experimentals and controls reported use of some drug during the first 9-month period and about a quarter reported use during the second.

[1/] During the second period, the sites with the largest reductions in benefits received by experimentals tended to be those with the largest employment differentials. The exception is the Oakland sample, which had small earnings differences but the largest difference in welfare income and food stamp bonuses.

[2/] Respondents to an early version of the 9-month interview were omitted from this analysis because of missing data on certain drug-use variables. A higher proportion of these early enrollees reported drug use than the average of this sample. However, since experimentals and controls are not treated differentially in the sample exclusion process, the results reported here will be unbiased.

TABLE V.9

REPORTED DRUG USE, EXPERIMENTALS AND CONTROLS,

EX-OFFENDER SAMPLE

Drug	Months 1-9			Months 10-18		
	Experimentals	Controls	Experimental-Control Differential[a]	Experimentals	Controls	Experimental-Control Differential
Any Drug (other than marijuana)						
Percentage reporting any use	28.1	29.2	-1.1	24.8	25.6	-0.8
Heroin						
Percentage reporting any use	12.1	9.8	2.3	8.6	7.2	1.4
Opiates, Other than Heroin						
Percentage reporting any use	10.9	10.7	0.1	7.0	9.7	-2.7
Percentage reporting daily use	n.a.	n.a.	n.a.	4.7	6.6	-1.9
Cocaine						
Percentage reporting any use	16.4	15.5	0.9	14.9	13.8	1.1
Marijuana						
Percentage reporting any use	63.1	63.4	-0.3	61.4	63.9	-2.5
Percentage reporting daily use	n.a.	n.a.	n.a.	21.1	24.4	-3.3
Alcohol						
Percentage reporting daily use	11.6	15.8	-4.2	16.7	16.1	0.6

TABLE V.9 (Continued)

NOTE: The data are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experiences, household composition, prior receipt of income from other sources, site, length of site operation, prior drug use, and criminal history. These estimates were calculated using ordinary least square (OLS) techniques. Although probit is a more appropriate estimation technique when the dependent variable takes only two values, results evaluated at the mean have been shown, in general, to be quite similar for the two estimation procedures. We chose to use OLS techniques because we planned to evaluate the experimental-control group differences at the mean values of the independent variables and because this information is more readily available from the standard output from OLS regression packages. Results for daily use of heroin and cocaine were omitted since less than 5 percent of both groups reported such frequent use.

[a] None of the experimental-control differentials was statistically significant at the 10 percent level.

n.a. = not available.

Between 10 and 12 percent of both groups used heroin and other opiates during the first 9-month period and between 7 and 10 percent reported their use in the second. About 15 percent of both groups used cocaine, two-thirds used marijuana, and 12 to 17 percent reported drinking alcohol daily during each 9-month period.[1/]

2. Differences in Results Among Sites and Subgroups of the Sample

To determine whether some Supported Work sites are more effective than others and/or whether some types of individuals respond differently to Supported Work than others, regression adjusted estimates of the proportions of the experimental and control samples using heroin were computed for each site and for various other subgroups of the sample. The results, displayed in Table V.10, still show few statistically significant differences between experimentals and controls. Experimentals in Oakland were considerably more likely than controls to use heroin during either time period. However, during months 10 to 18 the reverse was true for the San Francisco sample, primarily because use among the control group increased considerably from the first to the second 9-month period. The only other statistically significant result was that, among individuals who were in drug treatment programs prior to their enrollment, heroin use was also much more common in the experimental sample than in the control group in the second period.

Although heroin is the most widely used opiate, use of other opiates and of cocaine are also of concern. Hence, regression adjusted

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[1/] The (unadjusted) proportions of experimentals and controls in alcohol and drug treatment programs were also compared. For the one-through-nine-month period, there were slight positive experimental-control group differences (10.3 percent of experimentals, 9.8 percent of controls). For the later period, the proportion of experimentals in treatment remained roughly unchanged (10.1 percent), while the percent of controls in treatment dropped to 7.2 percent.

TABLE V.10

PERCENTAGE REPORTING USE OF HEROIN, EXPERIMENTAL-CONTROL DIFFERENTIALS, EX-OFFENDER SUBGROUPS

Subgroup	Months 1-9		Months 10-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Total	2.3	9.8	1.4	7.2
Site[a/]				
Chicago	-3.7	7.2	0.3	3.7
Hartford	0.3	4.9	1.7	2.3
Jersey City	-0.4	8.5	4.2	2.7
Newark	8.0	9.8	0.9	6.9
Oakland	11.3**	11.1	10.4**	5.8
Philadelphia	-5.5	13.2	-0.7	7.5
San Francisco	1.2	14.8	-9.3*	22.7
Length of Site Operation at Time of Enrollment				
6 months	-2.0	13.8	4.6	6.4
15 months	2.8	9.3	1.0	7.3
Eligibility Status				
Eligible	2.7	9.5	0.5	7.1
Ineligible	0.7	11.4	5.8	7.5
Age at Enrollment				
Younger than 21	3.9	4.5	1.2	5.6
21 through 34	2.1	11.2	2.2	7.5
35 or older	1.5	8.1	-6.7	8.7
Length of Longest Job				
None	2.6	9.1	7.4	0.4
1-12 months	1.9	12.4	-0.1	8.2
More than 12 months	2.8	6.4	1.5	8.0

TABLE V.10 (Continued)

Subgroup	Months 1-9		Months 10-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Job Training Year Prior to Enrollment				
Less than 8 weeks	2.2	10.3	0.8	7.9
8 weeks or more	2.8	7.4	3.9	4.3
Number of Arrests[a/]				
None	1.0	9.2	-1.6	7.3
Four	1.6	9.5	-0.2	7.2
Eight	2.3	9.8	1.2	7.2
Parole/Probation Status				
Not on parole/probation	4.7	8.9	2.1	7.5
On parole/probation	-1.7	11.4	0.1	6.7
Drug Treatment[a/]				
Not in treatment	2.8	8.9	-0.1	7.2
In treatment program	-1.7	17.2	13.0**	6.9

NOTE: The data are regression adjusted estimates that control for age, sex, race, education, prior work and job training experience, household composition, length of site operation, prior drug use, and criminal history. The equation to estimate site differences did not include status interacted with the other subgroup characteristics, and vice versa. These estimates were calculated using ordinary least square (OLS) techniques. Although probit is a more appropriate estimation technique when the dependent variable takes only two values, results evaluated at the mean have been shown, in general, to be quite similar for the two estimation procedures. We chose to use OLS techniques because we planned to evaluate the experimental-control group differences at the mean values of the independent variables and because this information is more readily available from the standard output from OLS regression packages.

[a/] Estimated program effects varied significantly among the subgroups during the second 9-month period.

*Statistically significant at the 10 percent level on a two-tailed test.

**Statistically significant at the 5 percent level on a two-tailed test.

differences in the proportions of experimentals and controls using any drug (other than marijuana or alcohol) were computed for each of the ex-offender sites and for the various subgroups identified in the previous table. Table V.11 presents results that are very similar to those found in the comparison of heroin use rates. The largest experimental effects for the second 9-month period were again found in Oakland, where a significantly higher proportion of experimentals than controls used drugs, and in San Francisco, where a substantially smaller proportion of the experimentals than controls used them.

The primary differences between the analysis of heroin use and of any drug use were found for the first 9-month period. Among those who were in drug treatment programs, and among those who were on probation or parole at enrollment, a significantly smaller proportion of experimentals than controls were drug users. These experimental-control differences were not found when heroin use was considered.[1/] Also in the early period, there was considerably more variation among the sites in the results for use of any drugs than was found in the heroin use comparisons.

D. CRIMINAL ACTIVITY

The analysis of a variety of indicators of involvement in crime suggests that Supported Work had no effect on criminal activities, either for the overall ex-offender sample or for various subgroups of the sample. Table V.12 summarizes some of these results. Over the 18-month period, according to their own reports, 43 percent of experimentals and 45 percent of controls were arrested; a quarter of both groups were convicted of an

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[1/] However, for the later period, of those who were in drug treatment programs, a substantially larger proportion of experimentals than controls were users in this subgroup, a result that coincides with the results of heroin use.

TABLE V.11

PERCENTAGE REPORTING USE OF ANY DRUG, EXPERIMENTAL-CONTROL DIFFERENTIALS,

EX-OFFENDER SUBGROUPS

Subgroup	Months 1-9		Months 10-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Total	-1.1	29.2	-0.8	25.6
Site[a/]				
Chicago	-7.3	26.4	-3.7	20.4
Hartford	-7.6	15.0	-7.0	13.5
Jersey City	-1.3	30.5	1.8	15.6
Newark	-2.2	28.2	-5.1	30.4
Oakland	3.8	40.8	20.4**	21.6
Philadelphia	9.7	15.7	-5.8	19.3
San Francisco	-0.5	44.8	-11.5	58.4
Length of Site Operation at Time of Enrollment				
6 months	-0.8	26.8	-3.1	24.8
15 months	-1.2	29.5	-0.7	25.7
Eligibility Status				
Eligible	-1.7	30.8	-2.7	26.5
Ineligible	1.6	21.6	8.2	21.2
Age at Enrollment				
Younger than 21	-8.4	24.3	-8.1	28.1
21 through 34	0.4	30.2	-0.2	26.3
35 or older	0.9	31.8	8.5	11.6
Length of Longest Job				
None	5.5	30.3	3.9	17.0
1-12 months	3.2	26.5	-1.2	24.6
More than 12 months	-9.1	32.7	-2.1	29.8

TABLE V.11 (Continued)

Subgroup	Months 1-9 Experimental-Control Differential	Months 1-9 Control Group Mean	Months 10-18 Experimental-Control Differential	Months 10-18 Control Group Mean
Job Training Year Prior to Enrollment				
Less than 8 weeks	-0.4	29.0	-2.0	27.0
Eight or more weeks	-4.6	30.2	4.1	19.4
Number of Arrests[b]				
None	-5.6	28.8	-2.6	25.1
Four	-3.4	29.0	-1.8	25.3
Eight	-1.3	29.2	-1.0	25.6
Parole/Probation Status[b]				
Not on parole/probation	5.7	26.4	0.9	26.0
On parole/probation	-12.5**	34.0	-3.9	24.8
Drug Treatment[c]				
Not in treatment	0.9	27.8	-2.8	26.6
In treatment program	-18.0*	40.6	14.4	17.9

NOTE: The data are regression adjusted estimates that control for age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history. The equation to estimate site differences did not include status interacted with the other subgroup characteristics, and vice versa. These estimates were calculated using ordinary least square (OLS) techniques. Although probit is a more appropriate estimation technique when the dependent variable takes only two values, results evaluated at the mean have been shown, in general, to be quite similar for the two estimation procedures. We chose to use OLS techniques because we planned to evaluate the experimental-control group differences at the mean values of the independent variables and because this information is more readily available from the standard output from OLS regression packages.

[a] Estimated program effects varied significantly among the subgroups during the second 9-month period.

[b] Estimated program effects varied significantly among the subgroups during the first 9-month period.

[c] Estimated program effects varied significantly among the subgroups during both 9-month periods.

*Statistically significant at the 10 percent level on a two-tailed test.

**Statistically significant at the 5 percent level on a two-tailed test.

TABLE V.12

INDICATORS OF CRIMINAL ACTIVITY, EXPERIMENTALS AND CONTROLS,

EX-OFFENDER SAMPLE

	Months 1-9			Months 10-18			Months 1-18		
	Experimentals	Controls	Experimental-Control Differential[a]	Experimentals	Controls	Experimental-Control Differential[a]	Experimentals	Controls	Experimental-Control Differential[a]
Arrests									
Percentage with any arrests[b]	28.3	32.4	-4.1	24.9	21.8	3.1	42.6	44.8	-2.2
Number of arrests	0.36	0.38	-0.02	0.31	0.26	0.05	0.67	0.65	0.02
Months to first arrest	--	--	--	--	--	--	13.4	13.0	0.39
Percent with robbery arrest[b]	6.6	4.9	1.7	3.5	4.5	-1.0	9.1	8.9	0.2
Number of robbery arrests	0.07	0.05	0.02	0.04	0.05	-0.01	0.11	0.10	0.01
Convictions									
Percentage convicted[b]	13.5	16.2	-2.7	14.6	12.3	2.3	25.4	26.6	-1.2
Incarceration									
Percent incarcerated[b]	25.8	26.5	-0.7	25.5	24.1	1.4	34.2	35.7	-1.5
Number of weeks incarcerated	3.9	4.1	-0.2	6.0	5.2	0.8	9.9	9.4	0.7

NOTE: The data are regression adjusted estimates that control for differences in crime measures due to age, sex, race, education, prior work and job-training experience, household composition, length of site operation, drug use, and criminal history.

[a] None of the estimated experimental-control group differentials is statistically significant at the 10 percent level.

[b] These estimates were calculated using ordinary least square (OLS) techniques. Although probit is a more appropriate estimation technique when the dependent variable takes only two values, results evaluated at the mean have been shown, in general, to be quite similar for the two estimation procedures. We chose to use OLS techniques because we planned to evaluate the experimental-control group differences at the mean values of the independent variables and because this information is more readily available from the standard output from OLS regression packages.

offense; and about a third of them were incarcerated.[1/] Neither differences in periods of incarceration nor response rate differences account for the lack of observed experimental-control differences. Our conclusion is that Supported Work did not seem to have an influence on criminal activities, either during the time when ex-offenders were in the program or after they had left.

[1/] See Chapter IV (results for the ex-addict sample) for a discussion of the reliability of the self-reported data.

CHAPTER VI

FINDINGS FOR THE YOUTH SAMPLE

This chapter presents the results for our analysis of young school dropouts. The sample for this 18-month report includes 238 experimentals and 252 controls. Seventy-seven percent of these youth were enrolled at the Hartford and Jersey City sites.

Among those enrolled in the experimental group, only 25 percent stayed in the program through the twelfth month (see Table VI.1), even though 65 percent of the experimentals were enrolled in sites with mandatory graduation only after 18 active months. As with the other target groups, mandatory graduation policies seem to have had no impact on length of participation; the average length of stay was 6.9 months overall, but only 5.9 months in those sites with an 18-month graduation policy. Seventeen percent reported in their interviews that they had left Supported Work for another job or to enroll in an education or training program; 38 percent reported having left for reasons related to poor performance. The rest left for neutral reasons, such as lack of work, poor health, or family problems.[1/]

As with the ex-addict and ex-offender samples, we examined whether Supported Work influenced household composition or housing consumption; we found no noteworthy results. Therefore, we concentrate here on employment,

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[1/] The Supported Work Management Information System data indicate that of those youth in all sites who left Supported Work, 26 percent left for positive reasons, 54 percent for negative reasons, and 20 percent for neutral reasons (MDRC, 1978). Discrepancies between the MIS and interview data may result from differences in the time period covered and the sample considered, as well as unavoidable differences in the actual definition of these categories.

TABLE VI.1

LENGTH OF PARTICIPATION IN SUPPORTED WORK AND REASONS FOR DEPARTURE, YOUTH SAMPLE

	Sites with Mandatory Graduation After 12 Months of Participation[a]	Sites with Mandatory Graduation After 18 Months of Participation[b]	Total
Percentage Still in Program at the End of Month			
Three	82.8	66.9	72.7
Six	68.6	43.7	52.7
Nine	53.3	31.2	39.0
Twelve	39.1	17.2	25.2
Fifteen	13.8	7.9	10.1
Eighteen	0.0	3.4	2.0
Average Number of Months in the Program	8.6	5.9	6.9
Percentage Who Left Supported Work:			
To take another job or to enroll in school or job training	19.2	15.3	16.7
For reasons related to poor performance	12.8	53.4	38.3
For other reasons	67.9	3I.3	45.0

[a] Atlanta, Jersey City, and New York.

[b] Hartford and Philadelphia.

receipt of welfare and other income, education and training, drug use, and involvement in crime.

A. EMPLOYMENT

1. Overall Experimental-Control Differences

As with all target groups, a significantly higher percentage of experimentals than controls worked throughout the first year after enrollment. However, as shown in Table VI.2, these differences decreased from 67 percentage points (97 versus 30 percent) during the first three months to 23 percentage points during the 10-to-12-month period. After the first year, there were virtually no differences in employment rates between the two groups. In the most recent 6-month period, the percentage of controls who were employed increased from 31 to 47 percent.

Primarily as a result of these differences in employment rates, experimentals were employed an average of 117 more hours per month than were controls during the first 3-month period. (See Table VI.3 and Figure VI.1.) Also, those experimentals who were employed tended to work more hours per month than did controls (152 versus 107). This differential in hours worked declined over time as experimentals left Supported Work until, by the 13-to-15-month period, there was virtually no difference between them in either the employment rate or the number of hours worked, despite over one-third of the experimentals' hours deriving from their Supported Work jobs.

Throughout this period, experimentals and controls in the youth target group commanded approximately the same wage rates ($2.77 versus

TABLE VI.2

PERCENTAGE EMPLOYED IN ANY MONTH, EXPERIMENTALS AND CONTROLS, YOUTH SAMPLE

	Experimentals	Controls	Experimental-Control Differential	Percentage of Experimentals With Only Supported Work Jobs
Months 1-3	97.4	29.7	67.7**	92.4
Months 4-6	83.5	35.9	47.6**	69.2
Months 7-9	69.1	38.0	31.1**	51.5
Months 10-12	54.3	31.2	23.1**	35.7
Months 13-15	49.1	48.1	1.0	21.4
Months 16-18	42.1	47.4	-5.3	7.6

NOTE: The data on the percentage employed are regression adjusted estimates that control for differences in employment due to age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history. These estimates were calculated using ordinary least square (OLS) techniques. Although probit is a more appropriate estimation technique when the dependent variable takes only two values, results evaluated at the mean have been shown, in general, to be quite similar for the two estimation procedures. We chose to use OLS techniques because we planned to evaluate the experimental-control group differences at the mean values of the independent variables and because this information is more readily available from the standard output from OLS regression packages.

**Statistically significant at the 5 percent level on a two-tailed test.

TABLE VI.3

AVERAGE HOURS WORKED PER MONTH, EXPERIMENTALS AND CONTROLS,

YOUTH SAMPLE

	Experimentals	Controls	Experimental-Control Differential	Program Hours of Experimentals	
				Number	Percent of Total Hours
Months 1-3	148.3	31.7	116.6**	135	91
Months 4-6	124.3	38.6	85.7**	102	82
Months 7-9	99.5	37.7	61.8**	76	76
Months 10-12	79.6	40.9	38.7**	51	64
Months 13-15	65.0	63.8	1.2	24	37
Months 16-18	57.2	60.1	-2.9	7	12

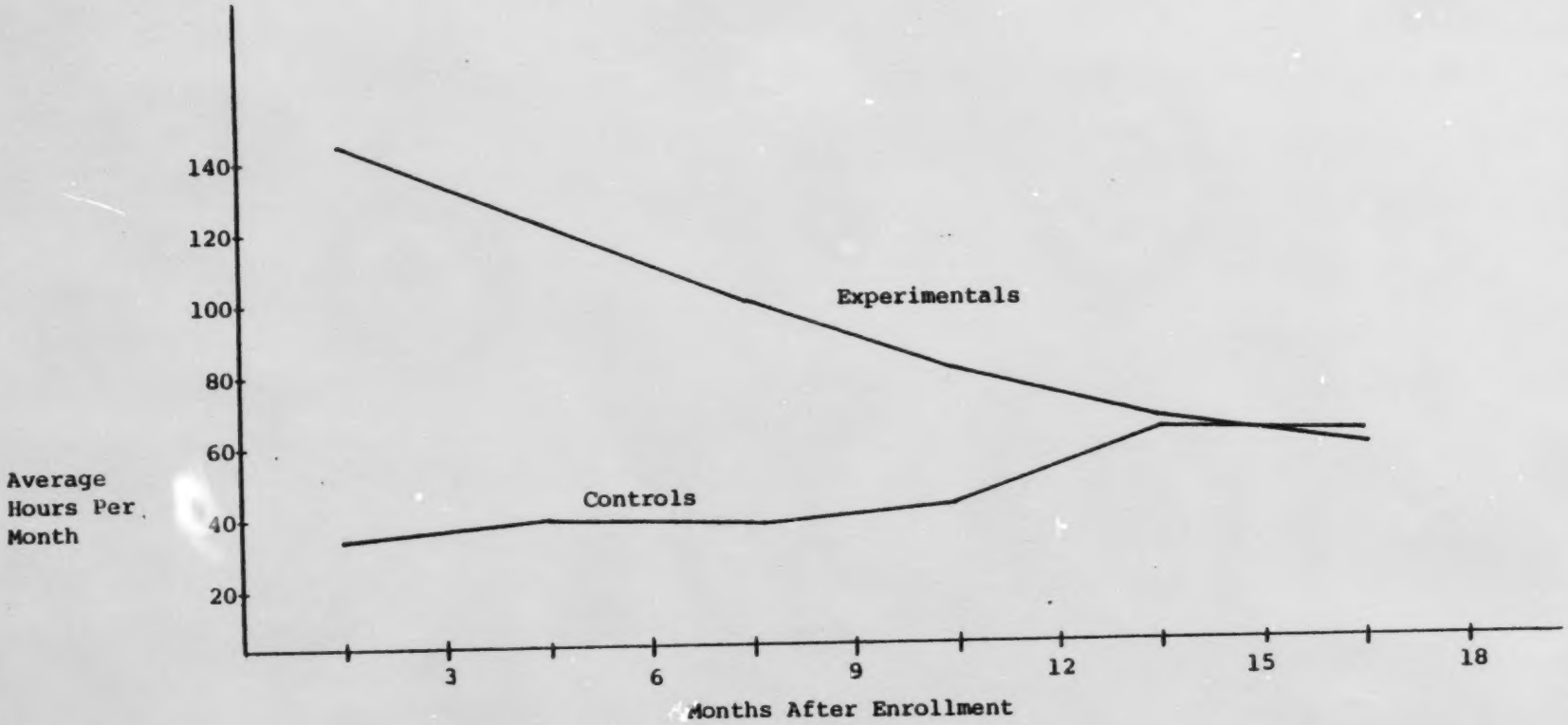
NOTE: The data on hours worked in all jobs, presented in the first three columns, are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history.

**Statistically significant at the 5 percent level on a two-tailed test.

FIGURE VI.1

AVERAGE HOURS WORKED PER MONTH, EXPERIMENTALS AND CONTROLS,

YOUTH SAMPLE



NOTE: Only those experimental-control differences during the first year are statistically significant at the 5 percent level.

$2.89 per hour during the first 9-month period, and $3.37 versus $3.24 during the last 3-month period).[1/]

Thus, the earnings differentials presented in Table VI.4 result primarily from the hours differentials noted above. During the first three months, experimentals earned $396 per month and controls only $94. By the 16-to-18-month period, the earnings of experimentals were less than half that of the first three months ($193) and the earnings of controls were more than twice that of the initial three months ($195). Most of the increase in earnings among controls occurred between the 10-to-12-month and the 13-to-15-month periods.

These overall results for Supported Work youth are somewhat less favorable than those for the other target groups. That a significantly higher percentage of Supported Work experimentals than controls (12 versus 4 percent) were receiving unemployment compensation during the more recent months is only a partial explanation for the lack of longer-run employment effects.[2/]

2. Differences in Results Among Sites and Across Subgroups of the Sample

Table VI.5 presents, for the first and second 9-month periods, regression adjusted estimates of program effects on hours employed for various subgroups of the sample.

[1/] Average hourly wage rates earned by experimentals and controls (weighted by the number of hours an individual worked) can be calculated by dividing the average monthly earnings data presented in Table VI.4 by the average monthly hours worked presented in Table VI.3. Throughout the 18-month period, the average hourly earnings in nonprogram jobs tended to be higher for experimentals than for controls.

[2/] A crude estimate of the overall impact of unemployment compensation on the results is that it may have reduced the hours differential during the 16-to-18-month period by about 6 hours per month.

TABLE VI.4

AVERAGE EARNINGS PER MONTH, EXPERIMENTALS AND CONTROLS,

YOUTH SAMPLE

	Experimentals	Controls	Experimental-Control Differential	Program Earnings of Experimentals
Months 1-3	$396.2	$ 93.5	$302.7**	$362.1
Months 4-6	346.4	108.7	237.7**	277.8
Months 7-9	287.9	108.5	179.4**	210.2
Months 10-12	243.2	125.5	117.7**	141.7
Months 13-15	207.6	202.7	4.9	68.1
Months 16-18	192.5	194.8	-2.3	22.0

NOTE: The earnings data presented in the first three columns are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history.

**Statistically significant at the 5 percent level on a two-tailed test.

TABLE VI.5

HOURS EMPLOYED PER MONTH, EXPERIMENTAL-CONTROL DIFFERENTIALS,

YOUTH SUBGROUPS

Subgroup	Months 1-9		Months 10-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Total	88.0**	35.7	12.3**	55.5
Site[a]				
Atlanta	109.6**	60.3	38.2*	80.1
Hartford	83.6**	29.0	9.4	48.8
Jersey City	101.2**	47.1	16.0**	66.9
New York	81.5**	38.0	14.7	57.8
Philadelphia	66.1**	24.2	1.9	44.0
Program Age at Time of Enrollment[a]				
6 months	98.2**	24.2	22.4**	44.0
15 months	85.0**	39.1	9.3*	58.9
Eligibility Status				
Eligible	86.6**	36.8	10.8**	56.6
Ineligible	91.6**	32.9	15.8*	52.7
Length of Longest Job				
None	82.7**	31.9	7.0	51.7
1-12 months	89.3**	38.4	13.6**	58.2
> 12 months	92.1**	21.7	16.4	41.6
Weeks Worked Year Prior to Enrollment				
None	92.0**	28.5	16.3**	48.3
Five	89.9**	32.2	14.2**	52.0
Ten	87.9**	35.9	12.2**	55.7

TABLE VI.5 (continued)

Subgroup	Months 1-9 Experimental-Control Differential	Months 1-9 Control Group Mean	Months 10-18 Experimental-Control Differential	Months 10-18 Control Group Mean
Job Training Year Prior to Enrollment[a]				
Less than 8 weeks	84.9**	37.0	9.2*	56.8
Eight or more weeks	113.8**	25.3	38.1**	45.1
Welfare and Food Stamp Bonus				
None	85.1**	35.0	9.4	54.8
Some	94.4**	37.2	18.7**	57.0
Dependents				
None	87.9**	35.8	12.2**	55.6
One or more	89.0**	34.2	13.3	54.0
Incarceration				
Never	91.9**	37.5	16.1**	57.3
Within 1-12 months	80.0**	27.6	4.3	47.4
More than 12 months ago	76.3**	37.1	0.5	56.9
Number of Arrests				
None	90.6**	38.1	14.8**	57.9
Four	85.2**	34.2	9.4*	54.0
Nine	78.3**	29.4	2.6	49.2

NOTE: The data are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, prior drug use, and criminal history. The equation used to estimate site effects did not permit variations in results among other subgroups, and vice versa.

[a] Estimated program effects vary significantly among the subgroups.

*Experimental-control difference for the subgroup is statistically significant at the 10 percent level.

**Experimental-control difference for the subgroup is statistically significant at the 5 percent level.

The differentials vary substantially across sites, with the largest being observed for the Atlanta and Jersey City samples.[1] The Jersey City result is explained by the tendency of experimentals there to stay in Supported Work a relatively long time.[2] The differential for Atlanta, on the other hand, resulted not only from experimentals staying in the program for a relatively long time but also from their relative success in finding nonprogram jobs after leaving Supported Work.[3]

There were also significant differences in the results depending on the length of site operation when an individual enrolled: those who enrolled in newer programs tended to work more hours per month relative to controls than did later enrollees. This may be, in part, the result of the simultaneous improvement in the labor market, which led to the increasing employment over time among controls, and it may also reflect changes in the way Supported Work operations were conducted at the sites.

Other characteristics associated with relatively large differentials include having had a job or at least eight weeks of job training prior to enrollment, being on welfare at enrollment, and having no criminal history.[4]

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[1] The Atlanta sample includes only 17 persons. The next smallest is Philadelphia, with only 35.

[2] By the 16-to-18-month period, when youth experimentals in Jersey City were no longer eligible to participate in the program, we observed that they were working significantly less than controls. In part, this reversal in results is because a third of those who left the Jersey City program received unemployment compensation and so had less incentive to find other employment.

[3] The favorable finding for Atlanta persisted into the 16-to-18-month period, when we observed experimentals working 32 hours more per month than controls.

[4] Because so few youths reported using drugs regularly (6 percent), we did not look at the effect of drug use on employment outcomes.

The only significant result, however, was that associated with job training. During the second 9-month period, those with training worked 38 hours per month more than their control counterparts, while those without training worked only 9 hours more per month, on average.

3. Patterns of Employment

The employment pattern of experimentals was quite similar to that of controls. At the end of the first 9-month period after enrollment, a higher percentage of experimentals than controls were in the labor force (83 versus 70 percent) and working (58 versus 27 percent), mainly in their Supported Work jobs: 25 percent of the youth experimentals were unemployed, compared with 43 percent of the controls. However, by the end of the second 9-month period, the two groups had converged: about three-quarters of the experimentals and controls in the youth target group were in the labor force and about half of those were working. About 37 percent of both groups were unemployed.

The data presented in Table VI.6 suggest that 58 percent of the experimental group found a job after leaving Supported Work and 77 percent of controls had a job sometime during the 18-month period. In contrast to other target groups, most of the youth, whether in the experimental group or the control group, found these jobs on their own: only 15 percent of experimentals said they were helped by the Supported Work program and only 10 percent of controls used the Employment Service.

In comparing the nonprogram job experience of youth experimentals after they left Supported Work with the job experience of controls throughout the period, we find that those experimentals with a nonprogram job worked a higher percentage (48 percent) of their available (post-

TABLE VI.6

NONPROGRAM EMPLOYMENT EXPERIENCES, EXPERIMENTALS AND CONTROLS,

YOUTH SAMPLE

	Months 1-18	
	Experimentals	Controls
Percentage Who Left Supported Work	98.7	n.a.
Average Month of Supported Work Termination	6.9[a]	n.a.
Percentage With Nonprogram Employment[b]	57.4	76.8
Of Those With Nonprogram Employment		
Percentage who found job with help of		
Supported Work	15.1	n.a.
Employment Service	4.4	10.4
Percentage of Available Weeks Employed	47.5	35.8
Hours Worked Per Week[c]	18.2	14.0
Average Hourly Wages[d]	$3.53	$3.07
Percentage With CETA or WIN Jobs	8.4	10.2
Percentage With CETA, WIN or Government Jobs	21.8	28.3

[a] Thirteen percent of the sample left the program more than once. On average, individuals were in Supported Work 6.3 months at the time of their first termination. The overall average length of stay was 6.9 months.

[b] The average number of spells of continuous employment was 1.3 for experimentals and 1.5 for controls.

[c] For experimentals, the average hours worked per week were calculated on those weeks since leaving the program.

[d] These wage rates are calculated as the average, for all individuals who had jobs, of their total earnings divided by the number of hours they worked.

n.a. = not applicable.

Supported-Work) weeks than did controls (36 percent) of their available weeks. However, adjusting for the employment rate differential, we observe that both groups worked about 28 percent of the weeks available to them.

One indication of a favorable program effect is that, on average, in their nonprogram jobs experimentals earned 46 cents per hour more than did controls. This may be the result, in part, of the lower participation by experimentals relative to controls in jobs that may have been subsidized (8 to 22 percent versus 10 to 28 percent of those employed).

Over the full 18-month period, the youth experimentals worked 903 hours and earned $2,520 more than controls. However, most, if not all, of the employment-related benefits of Supported Work for the youth target group accrued during the earlier months when experimentals were still participating in Supported Work. Even though there is some evidence that Supported Work is more effective for youth in certain sites or under certain local labor market conditions, the evidence is, at best, modest.

B. WELFARE RECEIPT AND OTHER SOURCES OF INCOME AND IN-KIND BENEFITS

At enrollment, 11 percent of the youth were receiving welfare; of those, about 30 percent received AFDC, 40 percent received GA, and the remainder received other types of welfare.

1. Overall Experimental-Control Differences

The percentage of the sample receiving various types of income appears in Table VI.7. During the first 9-month period when, as we have seen, many experimentals were still participating in Supported Work, 99 percent of the youth experimentals reported earnings, compared with only

TABLE VI.7

INCOME RECEIVED FROM VARIOUS SOURCES, EXPERIMENTALS AND CONTROLS,

YOUTH SAMPLE

	Months 1-9			Months 10-18			Months 16-18		
	Experimentals	Controls	Experimental-Control Differential	Experimentals	Controls	Experimental-Control Differential	Experimentals	Controls	Experimental-Control Differential
Percentage Receiving Income from									
Earnings	98.5	50.1	48.4**	65.2	59.4	5.8	42.1	47.4	-5.3
Unemployment compensation	2.2	5.3	-3.1*	13.9	4.2	9.7**	12.2	3.8	8.4**
Welfare[a/]	10.4	15.8	-5.4*	20.5	21.8	-1.3	16.9	18.3	-1.4
Food stamps	31.5	33.2	-1.7	22.2	31.2	-9.0**	19.5	29.6	-10.1**
Other unearned income[b/]	4.8	4.9	-0.1	4.3	7.0	-2.7	4.3	4.3	0.02
Average Monthly Income from All Sources	$388.9	$161.3	$227.6**	$273.9	$264.8	$9.1	$261.8	$280.3	$-18.5
Earnings	343.5	103.5	240.0**	214.4	174.3	40.1**	192.5	194.8	-2.3
Unemployment compensation	2.4	7.1	-4.7*	22.1	6.1	16.0**	31.3	7.3	24.0**
Welfare[a/]	12.3	20.5	-8.2*	20.1	33.2	-13.1**	24.0	33.0	-9.0
Food stamp bonus value	17.1	16.9	0.2	9.8	15.5	-5.7**	9.8	15.0	-5.2**
Other unearned sources[b/]	6.3	3.7	2.6	4.5	8.8	-4.3	9.0	7.4	1.6

NOTE: The data are regression adjusted estimates that control for differences in income receipt from various sources due to age, sex, race, education, prior work and job training experiences, household composition, prior receipt of income from source, site, length of site operation, prior drug use, and criminal history.

[a/] Welfare includes AFDC, GA, SSI and other unspecified welfare income.

[b/] Other unearned income includes Social Security, pensions, alimony, child support.

*Statistically significant at the 10 percent level on a two-tailed test.
**Statistically significant at the 5 percent level on a two-tailed test.

50 percent of the controls. This differential drops off during the second 9-month period when 65 percent of the experimental group, as compared with 59 percent of the control group, reported earnings. This decline in employment of experimentals was accompanied by an increase in the percentage receiving UC benefits: during the second 9-month period 14 percent of the experimental group received these benefits, compared with only 4 percent of controls.

Although fewer experimentals than controls in the youth target group received welfare benefits in both the first and second 9-month periods, only the five percentage point difference observed during the first period was significant. During the second 9-month period, about 21 percent of both experimentals and controls received benefits. However, only 22 percent of experimentals compared with 31 percent of controls received food stamps during this latter period. This difference resulted from a drop in receipt among experimentals from the first nine months, when about one-third purchased food stamps.

The lower portion of Table VI.7 contains data on the average monthly amount of income received from the various sources. There was a significant difference in total income during the first 9-month period, when experimentals received $389 per month, as compared with $161 per month for controls. Most of this difference is accounted for by the $240 difference in earnings, which decreased considerably in the second 9-month period as experimentals left Supported Work and some controls found employment. By the 16-to-18-month period, both experimentals and controls were earning about $190 per month. This decline in earnings among experimentals was only minimally offset by increased unemployment

compensation and welfare benefits.[1/] By the 16-to-18-month period, in fact, not only earnings but total income of experimentals and controls were similar. About three-quarters of the total was from earnings and 15 percent was from welfare benefits and food stamp bonuses. The only significant experimental-control difference was that experimentals received an average of $24 more per month than controls from unemployment compensation. Income from "other sources" was generally low, and not significantly different between experimentals and controls.

We observed a slight reduction in Medicaid eligibility among youth experimentals relative to controls during the first 9-month period; 12 percent of experimentals, as compared with 19 percent of controls, reported having a Medicaid card. Similarly, during this period, youth experimentals who lived in public housing experienced a significant $20 per month increase in their rent relative to controls. Differences for both of these outcome measures were smaller and not significant in the second 9-month period.

There were no significant experimental-control differences for the youth target group in welfare benefits and other unearned income of other members of the respondents' households. In both time periods, about 15 percent of experimentals and controls reported that other household members received welfare benefits, and 8 percent reported that other household members received other types of unearned income. The average welfare benefit to other household members was between $35 and $45 per month.

[1/] It should be noted that welfare payments for controls tended to increase over time; they received $21 per month during the first nine months and $33 per month during the 16-to-18-month period.

2. Differences in Welfare Results Among Sites and Subgroups of the Sample

Table VI.8 contains regression adjusted experimental-control differences in the average monthly value of food stamps and welfare benefits received during the first and second 9-month periods by various subgroups of the youth sample.

With respect to site differences, during the first period the average monthly benefit for controls varied from $22 in Atlanta to $58 in Philadelphia. Benefits received by experimentals were lower than for controls at all sites, but the experimental-control differences generally were not statistically significant. In the second 9-month period, controls received an average of between $34 and $71 per month. Again, experimentals received lower benefits than controls at all sites. However, for this period the experimental-control differences in Hartford and Jersey City--$21 and $18, respectively--were statistically significant. It should be noted that experimentals in Jersey City received $54 more a month in unemployment compensation than did controls. This contributed to the significant differential in receipt of welfare benefits in this site.

The results for welfare and food stamp bonuses also varied among other subgroups of the sample, particularly during the first 9-month period when significant experimental-control differences were observed for only certain subgroups (see Table VI.8 for details). The only case in which the estimated program effects varied significantly between the subgroups, however, was related to program eligibility: those who met all the formal eligibility criteria experienced significantly smaller reductions in their benefits relative to controls than did those who failed to meet the criteria. For the second 9-month period, experimentals in most subgroups received

TABLE VI.8

VALUE OF WELFARE AND FOOD STAMP RECEIPTS, EXPERIMENTAL-CONTROL DIFFERENTIALS, YOUTH SUBGROUPS

Subgroup	Months 1-9		Months 10-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Total	-10.2**	36.7	-19.4**	49.1
Site[a]				
Atlanta	-24.8	21.5	-35.5	33.9
Hartford	-12.8**	31.0	-21.0**	43.4
Jersey City	-7.0	39.4	-17.9**	51.8
New York	-14.4	27.1	-21.6	39.5
Philadelphia	-2.1	58.2	-11.7	70.6
Program Age at the Time of Enrollment				
6 months	-6.1	33.2	-15.4*	45.6
15 months	-9.6*	37.7	-18.9**	50.1
Program Eligibility[a]				
Eligible	-3.0	33.8	-12.3**	46.2
Ineligible	-23.3**	43.8	-32.6**	56.2
Length of Longest Job				
None	-9.2	38.4	-18.5*	50.8
1-12 months	-8.2	35.7	-17.5**	48.1
More than 12 months	-13.7	40.8	-23.0	53.2
Weeks Worked Year Prior to Enrollment				
None	-15.0**	39.1	-24.3**	51.5
Five	-11.8**	37.9	-21.1**	50.3
Ten	-8.7*	36.6	-18.0**	49.0

TABLE VI.8 (Continued)

Subgroup	Months 1-9 Experimental-Control Differential	Months 1-9 Control Group Mean	Months 10-18 Experimental-Control Differential	Months 10-18 Control Group Mean
Job Training in Year Prior to Enrollment				
Less than 8 weeks	-10.1**	38.5	-19.4**	50.9
Eight or more weeks	1.6	22.5	-7.7	34.9
Welfare and Food Stamp Bonus Value				
None	-5.7	23.2	-14.9**	35.6
Some	-16.0*	66.7	-25.2**	79.1
Dependents				
None	-8.5*	32.4	-17.8**	44.8
One or more	-12.3	86.5	-21.6	98.9
Incarcerated				
Never	-12.3**	35.4	-21.5**	47.8
Within 12 months of enrollment	2.9	39.7	-6.4	52.1
Longer ago than 12 months	-5.5	38.8	-14.8	51.2
Number of Arrests				
None	-9.3*	36.9	-18.6**	49.3
Four	-7.9	36.6	-17.1**	49.0
Nine	-6.0	36.3	-15.3*	48.7

NOTE: The data are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experience, household composition, site, length of site operation, and criminal history.

[a]/Estimated program effects vary significantly among the subgroups.

*Experimental-control difference for the subgroup is statistically significant at the 10 percent level.

**Experimental-control difference for the subgroup is statistically significant at the 5 percent level.

significantly less than their control counterparts, and the results tended not to vary significantly among the subgroups.

C. EDUCATION AND TRAINING

During the 18-month period covered by this report, youth controls were significantly more likely than experimentals to enroll in job training programs. Between 3 and 5 percent of experimentals enrolled in training programs, compared with 7 to 11 percent of controls. Among both groups, the average length of participation was less than 20 weeks.

During the first 9-month period, a large portion (43 percent) of those experimentals with some training received it through the Supported Work program, and a third of the controls received theirs through CETA. During the second 9-month period CETA was the primary source of training for both groups; interestingly, 27 percent of the controls obtained their training in jail or prison, as compared with only 8 percent of experimentals.

No significant differences appeared between the percentages of youth experimentals and controls who attended school during the 18-month period. During both 9-month periods 13 to 15 percent of experimentals reported having been enrolled in school; 18 percent of the control group attended school at some time during the first period, and 12 percent during the second. During the first 9-month period, however, controls were enrolled in school for significantly more weeks, on average, than were experimentals (3.2 versus 1.8 weeks). About three-quarters of both the experimentals and controls who attended school were enrolled in a high school degree program.

Thus, in the short run at least, it seems that Supported Work will not increase participation in education and training programs, and may actually tend to reduce it.

D. DRUG USE

1. Overall Experimental-Control Differences

The percentage of experimentals and controls using any drugs[1/] were similar during both the first and second 9-month periods: 12 and 14 percent of the two groups, respectively, reported using drugs during the first period and 9 and 8 percent, respectively, during the second. Similarly, the reported use rates for specific drugs, presented in Table VI.9, indicate that experimentals and controls were equally likely to have used heroin, other opiates, and cocaine during both time periods. A comparison of reported use of these various drugs during the first and second 9-month periods showed a uniform decline in the use of all drugs, except alcohol, for both experimentals and controls. This result parallels the findings for ex-addict and ex-offender samples.

Although use of hard drugs was equally prevalent among the experimental and control groups, marijuana use was significantly higher among experimentals than among controls in both periods. Reported marijuana use remained at 50 percent for the control group in both periods; usage for the experimental group, however, was 63 percent during the first period and declined modestly to 59 percent during the second.[2/]

Use of alcohol increased for both the experimental and control groups from the first to the second period. As with marijuana, a larger

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[1/] These exclude marijuana and alcohol.

[2/] One explanation for the increase in marijuana use among youth experimentals is that their income had increased. Another is that it was the result of their contact, through Supported Work, with ex-addicts. However, the latter explanation was not supported by a comparison of experimental-control group differences for youth between those sites that have ex-addict target groups and those that do not.

TABLE VI.9

REPORTED DRUG USE, EXPERIMENTALS AND CONTROLS,

YOUTH SAMPLE

Drug	Months 1-9			Months 10-18		
	Experimentals	Controls	Experimental-Control Differential	Experimentals	Controls	Experimental-Control Differential
Any Drug (other than marijuana)						
Percentage reporting any use	12.2	13.6	-1.4	9.4	8.2	1.2
Heroin[a/]						
Percentage reporting any use	4.7	2.1	2.6	2.0	0.8	1.2
Opiates, Other than Heroin[a/]						
Percentage reporting any use	1.9	4.3	-2.4	1.2	1.0	0.2
Cocaine[a/]						
Percentage reporting any use	7.4	8.3	-1.0	5.0	6.9	-1.9
Marijuana						
Percentage reporting any use	62.5	49.9	12.6**	58.5	49.8	8.7*
Percentage reporting daily use	n.a.	n.a.	n.a.	25.5	22.8	2.7
Alcohol						
Percentage reporting daily use	9.7	6.1	3.6	12.6	11.3	1.3

TABLE VI.9 (Continued)

NOTE: The data are regression adjusted estimates that control for differences due to age, sex, race, education, prior work and job training experiences, household composition, prior receipt of income from other sources, site, length of site operation, prior drug use, and criminal history. These estimates were calculated using ordinary least square (OLS) techniques. Although probit is a more appropriate estimation technique when the dependent variable takes only two values, results evaluated at the mean have been shown, in general, to be quite similar for these two estimation procedures. We chose to use OLS techniques because we planned to evaluate the experimental-control group differences at the mean values of the independent variables and because this information is more readily available from the standard output from OLS regression packages.

a/ Daily use of heroin, other opiates, and cocaine was reported by less than 5 percent of the youth sample.

*Statistically significant at the 10 percent level on a two-tailed test.

**Statistically significant at the 5 percent level on a two-tailed test.

n.a. = not available.

proportion of the youth in the experimental group than in the control group used alcohol daily. This differential narrowed during the second period, however, and was not statistically significant in either.

2. Differences in Results Among Sites and Subgroups of the Sample

Table VI.10 contains the regression adjusted experimental-control comparisons among various subgroups of the youth sample. No statistically significant differences in results among the sites were detected. Among youths who enrolled in sites that had started operations more recently, experimentals were significantly less likely than controls to use drugs during the first--but not the second--9-month period. No other statistically significant differences in the percentage of experimentals and controls using drugs were detected among the various other subgroups examined.

E. CRIMINAL ACTIVITIES

By design, at least half of the youths enrolled in the demonstration should have had a "brush with the law." In fact, about 60 percent reported having been arrested prior to assignment.

We analyzed all the measures of involvement in crime described in Chapter IV, and the results for some of them are presented in Table VI.11. As can be seen from these data, Supported Work does not seem to have influenced significantly the youths' overall involvement in crime, either during the time they were in the program or subsequently.

Over the full 18-month period, 26 percent of youth experimentals and 29 percent of controls reported having been arrested at least once, and the first arrest for both groups occurred, on average, 15 months after enrollment in the Supported Work demonstration. Between 16 and 17 percent

TABLE VI.10

PERCENTAGE REPORTING USE OF ANY DRUG, EXPERIMENTAL-CONTROL DIFFERENTIALS, YOUTH SUBGROUPS

Subgroup	Months 1-9		Months 10-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Total	-1.4	13.6	1.2	8.2
Site[a]				
Atlanta	-14.4	21.3	0.9	2.6
Hartford	-0.1	7.9	2.0	1.1
Jersey City	-4.6	21.9	-2.0	21.4
New York	12.5	15.5	-3.7	17.5
Philadelphia	-5.6	13.6	10.8	0.0
Length of Site Operation at Time of Enrollment[a]				
6 months	-18.2**	22.4	-0.7	8.7
15 months	1.1	12.5	1.6	8.1
Eligibility Status				
Eligible	-0.7	15.0	1.6	9.8
Ineligible	-2.3	9.7	0.3	3.8
Age at Enrollment				
Younger than 19	-2.4	13.7	1.4	9.5
19 or older	0.6	13.4	1.2	6.5
Length of Longest Job[a]				
None	9.1	11.7	5.6	5.3
1-12 months	-6.3	15.2	-0.3	9.2
More than 12 months	16.1	3.2	2.2	9.1

TABLE VI.10 (Continued)

Subgroup	Months 1-9 Experimental-Control Differential	Months 1-9 Control Group Mean	Months 10-18 Experimental-Control Differential	Months 10-18 Control Group Mean
Job Training Year Prior to Enrollment				
Less than 8 weeks	-0.8	13.6	1.2	8.8
Eight or more weeks	-3.6	13.8	2.5	2.7
Number of Arrests				
None	-3.8	10.7	-0.4	4.9
Four	1.4	16.3	2.9	11.3
Eight	6.6	21.9	6.2	17.7
Parole/Probation Status				
Not on parole/probation	0.5	13.4	2.7	7.1
On parole/probation	-5.8	14.1	-2.8	11.4

NOTE: The data are regression adjusted estimates that control for age, sex, race, education, prior work and job training experience, household composition, length of site operation, prior drug use, and criminal history. The equation to estimate site differences did not include status interacted with the other subgroup characteristics and vice versa. These estimates were calculated using ordinary least square (OLS) techniques. Although probit is a more appropriate estimation technique when the dependent variable takes only two values, results evaluated at the mean have been shown, in general, to be quite similar for the two estimation procedures. We chose to use OLS techniques because we planned to evaluate the experimental-control group differences at the mean values of the independent variables and because this information is more readily available from the standard output from OLS regression packages.

[a/] Estimated program effects vary significantly among the subgroups during the first 9-month period.

**Statistically significant at the 5 percent level on a two-tailed test.

TABLE VI.11

INDICATORS OF CRIMINAL ACTIVITY, EXPERIMENTALS AND CONTROLS, YOUTH SAMPLE

	Months 1-9			Months 10-18			Months 1-18		
	Experimentals	Controls	Experimental-Control Differential[a]	Experimentals	Controls	Experimental-Control Differential[a]	Experimentals	Controls	Experimental-Control Differential[a]
Arrests									
Percentage with any arrests[b]	16.3	19.1	-2.8	16.0	15.0	1.0	25.7	28.5	-2.8
Number of arrests	0.19	0.23	-0.04	0.17	0.17	0.0	0.37	0.41	-0.04
Months to first arrest	--	--	--	--	--	--	15.3	14.9	0.44
Percentage with robbery arrest[b]	4.1	5.2	-1.1	2.8	2.4	0.4	6.9	7.7	-0.8
Convictions									
Percentage convicted[b]	10.3	9.9	0.39	8.6	9.5	-0.92	16.3	16.9	-0.62
Incarceration									
Percentage incarcerated[b]	9.8	13.1	-3.3	12.8	12.0	0.8	16.3	19.1	-2.8
Number of weeks incarcerated	1.3	2.1	-0.8	2.6	2.4	0.2	3.8	4.5	-0.7

Note: The data are regression adjusted estimates that control for differences in crime measures due to age, sex, race, education, prior work and job-training experience, household composition, length of site operation, prior drug use, and criminal history.

[a] None of the estimated experimental-control group differences is statistically significant at the 10 percent level.

[b] These estimates were calculated using ordinary least square (OLS) techniques. Although probit is a more appropriate estimation technique when the dependent variable takes only two values, results evaluated at the mean have been shown, in general, to be quite similar for the two estimation procedures. We chose to use OLS techniques because we planned to evaluate the experimental-control group differences at the mean values of the independent variables and because this information is more readily available from the standard output from OLS regression packages.

of both groups were convicted during this period and 16 percent of experimentals versus 19 percent of controls were incarcerated.

We also investigated whether there were significant differences in criminal activity results between experimentals and controls in various subgroupings of the youth sample, and found none.

CHAPTER VII

CONCLUSION

A. FINDINGS

The overall results suggest that Supported Work did have favorable effects on participants, particularly during the period when experimentals were eligible to participate in the program. During the first 9-month period after enrollment, experimentals in all target groups worked more hours, earned more money, and had higher total income than their control counterparts. Furthermore, experimentals in all target groups received significantly lower welfare benefits than their control group counterparts. During the second 9-month period, however, these differentials in earnings, total income, and welfare dependence diminished. By the 16-to-18-month period, the total income and earnings differentials were statistically significant only for the AFDC target group; and the welfare income differential was significant only for the AFDC and ex-offender groups.

Two other particularly noteworthy findings emerged from the analysis. First, a lower percentage of experimentals than controls in the ex-addict sample reported having been arrested at any time after enrollment. This finding is particularly important because the relative decline in arrests derived largely from a reduction in robbery arrests, which have a very high social cost. Second, a significantly higher percentage of youth experimentals than controls reported using marijuana.

The rest of this chapter summarizes the results in each of the five major outcome areas--employment and earnings, income sources and welfare dependence, education and training, drug use, and criminal activities--and then presents some concluding comments.

1. Employment and Earnings

Supported Work led to increased employment and earnings among experimentals as compared to controls, particularly during the period when experimentals were eligible for Supported Work jobs. The results are summarized in Table VII.1 and the trend in the experimental-control differential in hours worked is shown in Figure VII.1. These program effects were largest during the first 9-month period, when the percentage employed was between 39 and 63 points higher for experimentals than for controls. The employment rate differentials were accompanied by experimentals working between 74 and 115 hours more per month and earning between $201 and $351 more per month than their control counterparts. The effects on employment were largest for AFDC target group members, and they were smallest for the ex-offender group, in part because experimentals in the AFDC group tended to stay in Supported Work the longest (over nine months, on average) and the ex-offender group had the shortest average stay in the program (six months, on average).

The earnings differential during this early period was also greatest among the AFDC group ($351 per month), and smallest among the ex-addict group ($201 per month). The relatively large differential for the AFDC group resulted in part from the greater hours differential between experimentals and controls and in part from the somewhat higher average hourly earnings of experimentals ($2.97) than of controls ($2.57).[1/]

[1/] As noted in previous chapters, these hourly earnings figures can be calculated by dividing the average earnings by the average number of hours worked during a given period of time.

TABLE VII.1

EXPERIMENTAL-CONTROL DIFFERENTIALS IN EMPLOYMENT RATES, HOURS WORKED, AND EARNINGS

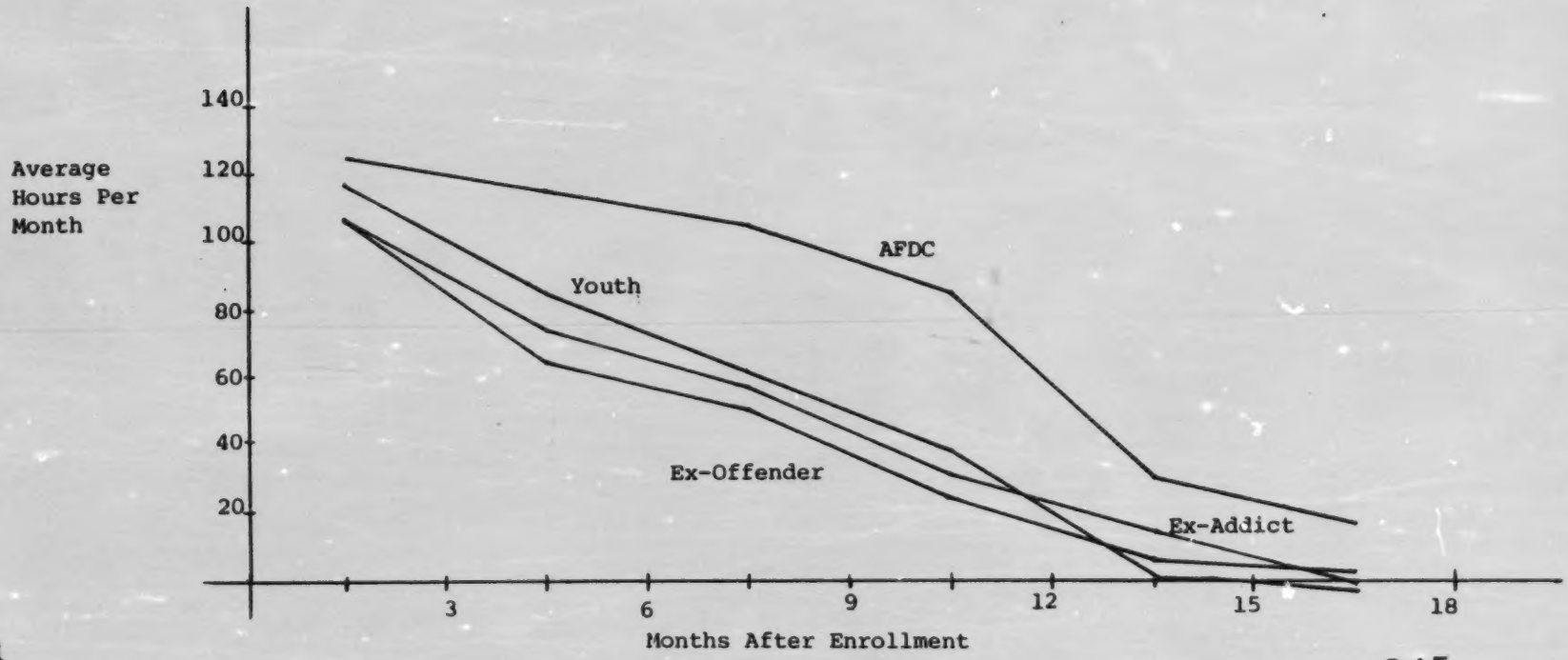
	Months 1-9		Months 10-18		Months 16-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Percentage Employed						
AFDC	62.9**	33.2	39.1**	36.4	10.4**	30.3
Ex-addict	47.9**	46.6	14.4**	50.0	-2.6	39.5
Ex-offender	38.9**	56.3	9.1**	55.9	3.6	42.8
Youth	48.4**	50.1	5.8	59.4	-5.3	47.4
Monthly Hours Worked[a/]						
AFDC	115**	23	44**	34	18**	37
Ex-addict	79**	39	18**	47	-2	49
Ex-offender	74**	44	11**	56	1	59
Youth	88**	36	12**	56	-3	60
Monthly Earnings ($)[a/]						
AFDC	351**	59	152**	110	78**	122
Ex-addict	201**	151	55**	194	-1	208
Ex-offender	205**	160	45**	224	29	233
Youth	240**	104	40**	174	-2	195

[a/] During the first nine-month period, experimentals in the AFDC, ex-addict, ex-offender, and youth target groups received 94, 83, 79, and 83 percent, respectively, of their earnings from and worked 95, 88, 83, and 85 percent of their hours on Supported Work jobs. By the 16-to-18-month period, less than 15 percent of earnings and hours of experimentals were related to program jobs, with the ex-offender group having the lowest percentage and the AFDC and ex-addict groups having the highest.

**Statistically significant at the 5 percent level on a two-tailed test.

FIGURE VII.1

EXPERIMENTAL-CONTROL DIFFERENTIALS IN AVERAGE NUMBER OF HOURS WORKED PER MONTH



In contrast, the relatively smaller earnings difference among the ex-addict group resulted from the experimentals in this group having earned substantially less per hour than controls. In the ex-offender and youth groups, wage rates of experimentals were somewhat lower than those of controls and, consequently, their earnings differences were attributable to the combination of Supported Work's influence on employment and the wage rate differences.

During the second 9-month period after enrollment, when between 34 and 68 percent of the experimental group members did not participate in the program at all, significant experimental-control differences persisted. As in the first nine months, these differences were largest for the AFDC target group. In comparison with controls, experimentals in the AFDC group had much higher employment rates, which led to their working an average of 44 hours and earning $152 more per month. Experimentals in the other target groups worked between 11 and 18 hours and earned between $40 (for the youth group) and $55 (for the ex-addict group) more than their control group counterparts. The relatively larger difference for the AFDC group was the result of the experimentals in the AFDC group having worked slightly more hours (primarily in Supported Work jobs) than experimentals in the other target groups, and controls in the AFDC group having worked only 60 to 70 percent as many hours as controls in the other target groups. In addition, the AFDC experimentals earned an average of 12 cents per hour more than controls; the average hourly earnings among experimentals and controls in the ex-offender and youth groups were quite similar. Average hourly earnings among experimentals in the ex-addict group were about 30 cents per hour lower than among controls.

It is noteworthy that during the second 9-month period, between 10 and 37 percent of the total earnings of experimental and control group members was from public sector jobs. Such jobs were most prevalent among the AFDC group, for which up to 20 percent of the experimental group's total earnings (40 percent of its nonprogram earnings) and 37 percent of the control group's earnings were from such jobs.

In many respects, the most interesting results are those for the 16-to-18-month period. By the start of this period about 92 percent of the experimentals had left the program; thus, these results can be viewed as preliminary indications of post-program effects. As we can see in Table VII.1, the only significant overall differences in employment-related outcomes during this period were for the AFDC target group. A significantly higher percentage of experimentals than controls in this group were employed during this period and, on average, the experimentals worked 18 hours and earned $78 more per month than their control group counterparts. Contributing to these large differences for the AFDC group relative to those for the ex-addict, ex-offender, and youth groups was the AFDC controls having worked and earned substantially less than controls in the other target groups.

There is some evidence to suggest that Supported Work has led to more favorable employment experiences among experimentals than among controls. In all target groups, experimentals who became employed after leaving Supported Work did, on average, earn higher wage rates than controls who found jobs. The wage rate difference is highest among the AFDC group ($.72) and lowest among the ex-addict group ($.23). Also, those experimentals who found jobs after leaving Supported Work tended to work a higher percentage of the time than did controls who found jobs.

2. Income Sources and Welfare Dependence

The evidence from this interim analysis suggests that Supported Work tended to increase the economic well-being of participants both during the in-program period and during the early post-program period. However, as we can see in Table VII.2, the components of the increase in income changed over time. During the first 9-month period, when a large portion of experimentals were in Supported Work programs, differences in total monthly income of experimentals in all target groups as compared to controls ($225 for the AFDC, $144 for the ex-addict, $167 for the ex-offender, and $228 for the youth groups) were the result of significantly higher earnings, lower unemployment compensation (UC), and lower welfare benefits and food stamp bonuses (except among the youth group).

During the 16-to-18-month period, when nearly all experimental group members had left their Supported Work jobs, the total income differential between experimentals and controls for the AFDC target group ($44) was still significant--due to a combination of higher earnings, higher unemployment compensation, and lower welfare benefits and food stamp bonuses among experimentals than among controls. Among the other target groups, total income was essentially the same for experimentals as it was for controls, in spite of experimentals receiving between $14 and $35 more per month in unemployment benefits. Only ex-offender experimentals continued to receive significantly less welfare than their control counterparts during this period.

As noted in the preceding discussion, the increase in income among experimentals relative to controls was accompanied by a substantial decrease in welfare dependence. During both 9-month periods, the percentage of experimentals receiving any welfare was significantly

TABLE VII.2

EXPERIMENTAL-CONTROL DIFFERENTIALS IN VARIOUS INCOME SOURCES

	Months 1-9		Months 10-18		Months 16-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Total Monthly Income ($)						
AFDC	225**	409	88**	426	44**	430
Ex-addict	144**	288	51**	330	25	345
Ex-offender	167**	230	15	318	7	327
Youth	228**	161	9	265	-19	280
Monthly Earnings ($)						
AFDC	351**	59	152**	110	78**	122
Ex-addict	201**	151	55**	194	-1	208
Ex-offender	206**	160	45**	224	29	233
Youth	240**	104	40**	175	-2	195
Monthly Unemployment Compensation ($)[a]						
AFDC	-2**	2	29**	4	47**	5
Ex-addict	-8**	11	21**	8	35**	9
Ex-offender	-4**	6	11**	9	14**	10
Youth	-5*	7	16**	6	24**	7
Welfare Income[b] Percent Receiving						
AFDC	-5.9**	99.4	-11.4**	91.1	-15.0**	85.4
Ex-addict	-20.7**	50.9	- 6.2**	48.5	- 5.2	44.1
Ex-offender	-13.2**	30.7	- 6.4**	29.7	- 6.0**	25.3
Youth	-5.4*	15.8	- 1.3	21.8	- 1.4	18.3
Monthly Amount ($)						
AFDC	-110**	274	-82**	242	-72**	233
Ex-addict	- 47**	94	-13*	89	- 9	88
Ex-offender	- 19**	36	-13**	45	-15**	47
Youth	- 8*	21	-13**	33	- 9	33
Monthly Food Stamp Bonus Value ($)						
AFDC	-20**	65	-18**	61	-15**	60
Ex-addict	- 4**	20	- 3	23	- 2	23
Ex-offender	- 3*	15	- 3	15	- 2	14
Youth	0	17	- 6	16	- 5	15

[a] Except in New York, Supported Work did not participate in the Unemployment Compensation program. Thus, the experimental group's benefits would have been funded primarily by the federal Special Unemployment Assistance (SUA) program.

[b] Welfare income includes AFDC, GA, SSI and other unspecified welfare income. Nearly all of the AFDC group's welfare income was from the AFDC program, while most of that received by the other target groups was from General Assistance programs.

* Statistically significant at the 10 percent level on a two-tailed test.

** Statistically significant at the 5 percent level on a two-tailed test.

lower than the percentage of controls for all except the youth target group. During the first nine months, it was 6 percentage points lower for the AFDC group, 21 percentage points lower for the ex-addict group, and 13 points lower for the ex-offender group. During the second 9-month period the percentage of experimentals receiving welfare was 11, 6, and 6 percentage points lower than for controls in the AFDC, ex-addict, and ex-offender target groups, respectively. Over the full 18-month period, this reduction in the percentage of experimentals receiving any benefits, together with a decrease in payments among many who continued to receive welfare after enrolling in the program, led to an average reduction in cash transfer payments among experimentals of $1,728 for the AFDC group, $540 for the ex-addict group, $288 for the ex-offender group, and $189 for the youth group.

In addition to this reduction in cash transfers, experimentals (in all but the youth group) tended to receive lower food stamp bonuses than did controls. The value of these reduced benefits over the full 18-month period ranged from $342 for the AFDC group to $54 for the ex-offender and youth groups. Also, AFDC experimentals, especially, tended to lose their Medicaid benefits as a result of their increased earnings: 75 percent of experimentals as compared with 88 percent of controls in the AFDC target group had a Medicaid card at the time of their 18-month interview.

In sum, experimentals increased their income substantially relative to controls, especially during the early months of the program. However, the net return from working was less than the actual money earned because of the resulting decrease in welfare benefits. This was

particularly true for the AFDC experimentals, whose total income increased by less than 75 cents for each dollar of earnings. Despite this substantial implicit welfare tax, we did not find that post-enrollment employment experiences were sensitive to expected welfare benefit reductions. This finding may seem to contradict the results of the numerous studies that suggest that there are work disincentive effects associated with welfare programs. However, welfare recipients who enrolled in Supported Work may not be representative of the entire population of recipients: individuals voluntarily applied to Supported Work, presumably with some knowledge of the impact that both in-program and post-program earnings would have on their welfare benefits.

3. Education and Training

Reported enrollment in school was not significantly different between experimentals and controls in the ex-addict, ex-offender, and youth target groups.[1/] During the first 9-month period, however, 21 percent of experimentals in the AFDC group as compared with 11 percent of their control group counterparts reported attending school (primarily vocational and high schools).

For all target groups, reported enrollment in training programs was low (generally less than 10 percent) among both experimentals and controls during the entire 18-month period. Nonetheless, significant differences were observed for both the AFDC and youth groups. During the second 9-month period, 3 percent of the AFDC experimentals and 8 percent of the AFDC controls reported having received training, mostly

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[1/] Among the youth group, most of those who attended school were enrolled in high school degree programs, while among the ex-addict and ex-offender groups most were enrolled in college or vocational programs.

through programs not connected with CETA, WIN, or Supported Work. Similarly, in the first and second 9-month periods, respectively, 3 and 5 percent of the youth experimentals, as compared to 7 and 11 percent of the youth controls, reported having been enrolled in training. (Half of those in both youth groups who reported receiving training during the 10-to-18-month period said that they had obtained it through CETA.)

4. Drug Use[1/]

As can be seen from the data presented in Table VII.3, Supported Work had very little impact on drug use, even among the ex-addict group, virtually all of whom had been in drug treatment prior to enrolling in the program. The only significant finding for the full target-group samples was that among the youth group, which had the most limited drug use experience at the time of their enrollment in Supported Work, experimentals tended to be more likely than controls to use marijuana; during both 9-month periods, half the controls reported using marijuana, compared with 63 and 59 percent of the experimentals in the first and second 9-month periods, respectively.[2/]

5. Criminal Activities[3/]

Table VII.4 summarizes some of the key findings related to involvement in crime. In addition to the findings for the two 9-month

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[1/] As noted previously, drug use among the AFDC sample has not been considered in this evaluation.

[2/] The increase in marijuana use did not occur primarily in those sites that also enrolled ex-addicts.

[3/] Only the ex-addict, ex-offender, and youth groups are considered in this discussion. AFDC sample members were not asked about the extent of any involvement in criminal activities.

TABLE VII.3

EXPERIMENTAL-CONTROL DIFFERENTIALS IN DRUG USE

	Months 1-9		Months 10-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Percent Using Heroin				
Ex-addict	-1.2	20.1	-1.5	14.8
Ex-offender	2.3	9.8	1.4	7.2
Youth	2.6	2.1	1.2	0.8
Percent Using Cocaine				
Ex-addict	3.8	12.8	2.3	12.2
Ex-offender	0.9	15.5	1.1	13.8
Youth	-1.0	8.3	-1.9	6.9
Percent Using Marijuana				
Ex-addict	-2.9	67.0	0.1	64.1
Ex-offender	-0.3	63.4	-2.5	63.9
Youth	12.6**	49.9	8.7*	49.8
Percent using Alcohol Daily				
Ex-addict	-2.5	15.9	3.8	11.6
Ex-offender	-4.2	15.8	0.6	16.1
Youth	3.6	6.1	1.3	11.3

* Statistically significant at the 10 percent level on a two-tailed test.

**Statistically significant at the 5 percent level on a two-tailed test.

TABLE VII.4

EXPERIMENTAL-CONTROL DIFFERENTIALS IN INDICATORS OF CRIMINAL ACTIVITIES

	Months 1-9		Months 10-18		Months 1-18	
	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean	Experimental-Control Differential	Control Group Mean
Percent Arrested						
Ex-addict	-5.2*	21.7	-6.9**	19.6	-11.2**	35.9
Ex-offender	-4.1	32.4	3.1	21.8	-2.2	44.8
Youth	-2.8	19.1	1.0	15.0	-2.8	28.5
Percent Arrested for Robbery						
Ex-addict	-4.4**	5.5	-2.7**	3.5	-6.7**	8.8
Ex-offender	1.7	4.9	-1.0	4.5	0.2	8.9
Youth	-1.1	5.2	0.4	2.4	-0.8	7.7

*Statistically significant at the 10 percent level on a two-tailed test.

**Statistically significant at the 5 percent level on a two-tailed test.

periods, we have included results for the full 18-month period, since these provide a better indication of the cumulative effect of Supported Work on involvement in criminal activities. For the ex-addict target group, significantly fewer experimentals than controls (25 versus 36 percent) reported having been arrested during the 18-month period. A large portion of this differential in arrests was attributable to a reduction in robbery and drug-related arrests. Experimentals in the ex-addict group also reported fewer convictions and incarcerations than did controls. Similarly favorable results in terms of reduced involvement in crime were not observed for experimentals in the ex-offender and youth target groups. Since the employment results for all three groups were quite similar, employment differences cannot explain the discrepancy in the results. It may be, however, that the effect of Supported Work on legitimate income relieved one of the ex-addicts' main motivations for committing robberies or making illegal drug sales.

B. CONCLUDING COMMENTS

The analyses summarized here have identified a number of favorable effects of Supported Work. These include increased total income, reduced welfare income, and among ex-addicts, reduced involvement with the criminal justice system. In all areas, the program effects tended to be greatest when experimentals were participating in Supported Work. Furthermore, the program's impact tended to be greater among the AFDC than among the other target groups.

Employment-related results in particular varied considerably among sites and across target groups within a site, suggesting that

labor market conditions, Supported Work program characteristics, and alternative programs may interact with the Supported Work participants' characteristics in determining the program's effects.

One of the more evident site-specific factors that is likely to have influenced the findings reported here is experimentals' participation in Unemployment Compensation programs.[1/] During the later months covered by this study, receipt was particularly high among those ex-addict, ex-offender, and youth experimentals in Jersey City and among the AFDC experimentals in New York; among each of these groups, experimental-control differences in employment-related outcome measures were either zero or negative by the 16-to-18-month period. Although a full-scale analysis of the effects of the Unemployment Compensation programs on post-program employment was not within the scope of this analysis, we did calculate some rough estimates of what the experimental-control differences would have been if experimentals had not gained eligibility for unemployment compensation through their Supported Work employment. This preliminary evidence suggests that experimentals who received unemployment compensation benefits may have reduced their employment during the 16-to-18-month period by an average of about 88 hours per month. The overall impact on the experimental-control differences during this period might, then, be in the neighborhood of 10 hours per month. This is a large enough figure to make it important

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[1/] As noted previously, the New York Supported Work program was the only program that participated in the State Unemployment Compensation Program. In other sites, experimentals could potentially gain eligibility for benefits under the federally funded Special Unemployment Assistance (SUA) Program. In part, eligibility for SUA was determined by whether the programs explicitly represented themselves as training or employment programs.

that future research efforts attempt to estimate more precisely Supported Work's effects under the counter-factual conditions whereby Supported Work employment did not contribute directly to eligibility for unemployment compensation benefits.

There is also some evidence that local labor market conditions may have affected Supported Work's impact. Even after controlling for sample characteristics and site, experimental-control differentials tended to be smaller for individuals enrolled later in calendar time. This is partly due to higher employment rates among controls who were enrolled at later dates. However, the detailed analysis required to fully understand the cause of this time trend had not been undertaken for this report.

The final report on this component of the evaluation of the Supported Work demonstration will address more thoroughly issues related to site and subgroup differences in results and to the impact of local labor-market conditions. Both the larger sample and the longer-term follow-up of the sample will facilitate this expansion in scope.

APPENDIX A

THE IMPACT OF NON-RESPONSE ON ESTIMATES OF THE EFFECTS OF SUPPORTED WORK

While efforts were made in designing the Supported Work sample to ensure that comparisions of experimental and control groups would yield unbiased estimates of the impact of the program, not all enrollees completed the assigned interviews. If the tendency of enrollees to complete assigned interviews is related to an outcome variable (such as current earnings), the estimate of the effect of Supported Work on that outcome may be biased. This appendix reviews the basic methodology for correcting for such bias and applies it to the sample analyzed in this report.

Section 1 gives the definition of non-response applicable to this study, and presents completion rates for the 9- and 18-month interviews for a Supported Work subsample. In Section 2 we lay out the methodology used to analyze the impact of non-response on program effects. Section 3 contains estimates of a model which relates the characteristics of individuals to the probability of their responding to the 9- and 18-month interviews. Section 4 presents calculations in which these estimated parameters are used to adjust estimates of the effect of Supported Work on several key outcome measures in such a way as to correct (at least approximately) for any bias induced by non-response. This correction is accurate, on average, for large samples if the model of response probability is reliable. For small samples, the accuracy is less certain. Nevertheless, this method provides the best means available for assessing and eliminating the impact of non-response on our analysis of the effects of Supported Work. Key findings are summarized in Section 5.

1. INTERVIEW RESPONSE RATES

The data set analyzed in the main body of this report consists of the sample of observations on all individuals completing baseline and 9- and 18-month interviews. Thus, anyone failing to complete either interview will be classified as a non-responder for the purposes of this analysis. However, labelling as a non-responder everyone who has been assigned an 18-month interview but for whom 18-month data are not available would overstate non-response rates, since attempts are made to interview individuals for approximately three months after the interview has been assigned. Furthermore, it takes two months on average for interview data to be transmitted, processed, and added to the existing data file. Therefore, we limit the sample used here to those individuals enrolled prior to November 1, 1976. By the time the data file used for this report was created, all these individuals would either have responded or been classified as non-responsive, since at least 5 months will have elapsed between the time an 18-month interview was assigned and the time the analysis file was created (September 15, 1978). While this leads to considerably smaller samples than those used in the text, neither responders nor non-responders will be over-represented in the data.

Given this sample, the proportions responding to the 9-month, 18-month, and both 9- and 18-month interviews are given in Table A-1 for each target group. Completion rates to the 9-month interview--which range from nearly 90 percent for AFDC recipients to 74 percent for ex-offenders--are higher than for the 18-month interview for each target group. Completion rates for the 18-month interview, though lower, follow the same pattern, with the AFDC target group showing the highest response rate and the

TABLE A-1

COMPLETION RATES FOR SUPPORTED WORK INTERVIEWS[1/]

Target Group	Percent Completing 9-Month Interviews	Percent Completing 18-Month Interviews	Percent Completing Both 9- and 18-Month Interviews
AFDC	89.6	82.5	78.4
Controls	89.8	82.7	78.1
Experimentals	89.3	82.2	78.6
EX-ADDICTS	80.6	68.3	62.0
Controls	77.3	67.1	59.3
Experimentals	83.9	69.6	64.7
EX-OFFENDERS	73.8	65.3	55.3
Controls	73.4	66.2	56.1
Experimentals	74.3	64.5	54.5
YOUTH	81.4	76.0	67.0
Controls	79.4	74.5	63.4
Experimentals	83.7	77.6	71.1

[1/] The subsample used in the construction of this table and throughout this Appendix consists of only those individuals who completed the pre-enrollment interview prior to November 1976. Thus, results may differ from those presented in Appendix B. Completion rates are calculated by dividing the number of completed interviews by the total number of interviews assigned to the field. Attempts are made in each wave of follow-up interviews to contact the full sample of people initially assigned to the experimental or control groups.

ex-offenders the lowest. For the purposes of this analysis, however, the third column of Table A-1 is the most relevant. Over 78 percent of the AFDC sample completed both 9- and 18-month interviews, while only 55 percent of ex-offenders did. Response rates for youth and ex-addicts lay between these extremes.

Response rates for experimentals and controls in each target group are also contained in the table. Experimentals yielded substantially higher response rates than controls in the youth and ex-addict samples. For ex-offenders and AFDC recipients, the response rates were more nearly equal. Whether this difference is due to experimental status directly or to other differences between experimentals and controls can only be determined by a formal analysis of response, such as that contained in Section 3.

2. THE PROBLEM OF RESPONSE BIAS

The method of analysis for the Supported Work evaluation used in the body of this report is the single equation multiple regression model. In the simplest case, outcomes of interest (such as earnings, employment, and drug use) are regressed on personal characteristics and on a dummy variable equal to one for experimentals and zero for control group members. More involved specifications include interaction terms between the experimental-control dummy and personal characteristics, in the belief that the program's impact may depend upon the socioeconomic characteristics of the participant. Program characteristics such as location or length of site operation may also be included in the model as regressors. The general regression model can be written as

$$Y = XB + \varepsilon, \tag{1}$$

where Y is the outcome variable, X is a matrix containing demographic and socioeconomic characteristics as well as program variables, ε is a disturbance term, and B is a vector of unknown parameters.

Estimation of B is usually accomplished by the use of ordinary least squares (OLS) regression methods. The OLS estimator can be written as

$$\hat{B} = (X'X)^{-1} X'Y. \tag{2}$$

Substituting (1) into (2) we have

$$\hat{B} = B + (X'X)^{-1} X'\varepsilon. \tag{3}$$

For a sample in which no systematic effect is operating to limit the sample available for analysis--that is, an uncensored sample--the expected value of the regression coefficient is

$$E(\hat{B}|X) = B + (X'X)^{-1} X' E(\varepsilon|X). \qquad (4)$$

Thus $\hat{B}$ is an unbiased estimator of B if $E(\varepsilon|X) = 0$; that is, if the conditional mean of the disturbance term is equal to zero. This condition is usually assumed to be satisfied for a properly specified model.

For a censored sample, we have the additional conditioning factor of the sample selection rule. Hence,

$$E(\hat{B}|X \text{ and selection rule}) = B + (X'X)^{-1} X' E(\varepsilon|X \text{ and selection rule}). \qquad (5)$$

If the conditional expectation of the disturbance term fails to equal zero, the coefficients will be biased. Thus, attention must focus on the relationship between the sample selection rule and the disturbance term ε.

The censoring mechanism in the case under consideration here is failure to obtain follow-up interviews (for any reason) for an individual. One way to view this mechanism is to imagine an index of response likelihood, R*. For values of R* exceeding zero the individual will be locatable and will be able and willing to complete the interview. Those with values of R* below zero will not complete interviews. Furthermore, assume that it is possible to identify some characteristics that affect the likelihood of response, such as whether the individual

has moved, whether he or she is incarcerated, and a variety of other personal traits. This model can be described as follows:

$$R^* = Z\delta + \eta, \tag{6}$$

where Z is a vector of personal traits affecting availability,[1/] δ is the coefficient vector, and η is a disturbance term. Of course, R^* is not observed directly; we only know whether or not an interview was completed:

$$R = \begin{cases} 1 \text{ for } R^* \geq 0, \text{ (i.e., } \eta \geq -Z\delta) \\ 0 \text{ for } R^* < 0, \text{ (i.e., } \eta < -Z\delta) \end{cases}, \tag{7}$$

where R = 1 for respondents and R = 0 for non-responders.

From (5) it can be seen that in order to obtain unbiased coefficients we require

$$E(\varepsilon | X, \eta \geq -Z\delta) = 0. \tag{8}$$

If ε has zero mean and ε and η are mean independent,[2/] this condition is satisfied (for nonstochastic Z). However, if the probability of non-response is affected by Y (and therefore by ε), ε and η are not independent, the expectation in (8) is not zero, and the regression estimates of the coefficients in equation (1) will be biased.[3/]

[1/] The vector Z may contain many of the same variables as X contains.

[2/] Mean or conditional independence implies that $E(\varepsilon|\eta) = E(\varepsilon)$, a somewhat stronger requirement than zero correlation, unless ε and η are assumed to have a bivariate normal distribution.

[3/] As noted by Peck (1973) and others, if the probability of non-response is related only to the regressors (X's) or is random, no response bias results.

This correlation between ε and η may result in two different ways. If Z contains only nonstochastic variables, and there exists an unmeasured variable (e.g., motivation or attitude) that affects both outcomes and the probability of response, then ε and η will be correlated. However, correlation of the disturbance terms of the estimating equations will result even if the disturbance terms in the structural equations are uncorrelated if current outcomes affect the probability of responding to requests for interviews. In this case the structural response model can be written as

$$R^* = X\delta_1 + Z^*\delta_2 + Y\delta_3 + \eta^*, \qquad (9)$$

where Z^* contains exogenous variables not included in X, and η^* is a disturbance term possibly uncorrelated with ε.[1/] Substituting equation (1) in (9) to obtain an equation that can be easily estimated we have

$$R^* = X\delta_1 + Z^*\delta_2 + (X\beta + \varepsilon)\delta_3 + \eta^* \qquad (10)$$

$$= X(\delta_1 + \beta\delta_3) + Z^*\delta_2 + (\eta^* + \varepsilon\delta_3),$$

$$R^* = Z\delta + \eta, \qquad (11)$$

where $Z = (X, Z^*)$, $\delta = \begin{pmatrix} \delta_1 + \beta\delta_3 \\ \delta_2 \end{pmatrix}$, and $\eta = (\eta^* + \varepsilon\delta_3)$.

Clearly the disturbance term in the estimating equation (11), which has the same form as equation (6), is correlated with ε, even if the disturbance terms η^* and ε are independent.[2/]

[1/] Some of the elements of δ_1 will be zero if there are variables in X which affect outcomes but not response.

[2/] The only difference between the two behavioral specifications that affects estimation of the model of probability of response is that equations (9)-(11) result in the inclusion of all exogenous variables from the outcome equation (1), including ones not considered to have direct impact on the likelihood of response. Only variables directly affecting response are included under the first specification, (6).

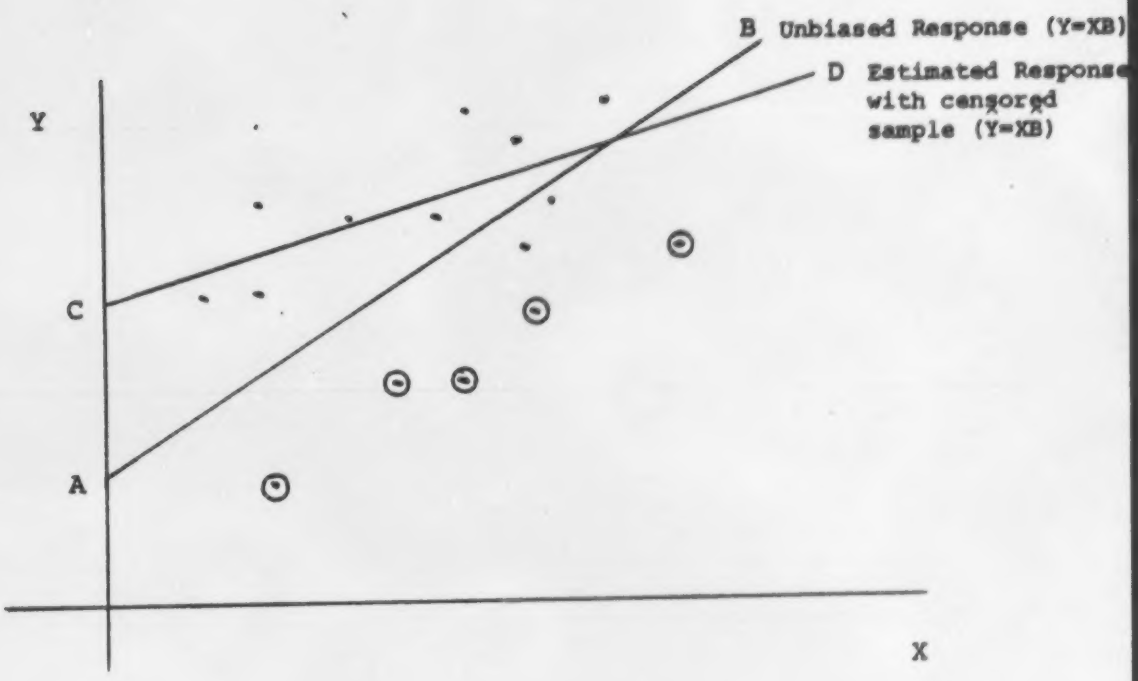
Figure A-1 provides an intuitive explanation of the problem. For a given vector Z, individuals with large negative values of η are more likely to be non-responders. If η and ε are positively correlated, the non-responders are more likely to be those with large negative deviations (ε) from the unbiased response line, AB--that is, those corresponding to the circled points in the diagram. Performing regression analysis on the restricted sample would produce an estimated regression line like CD. Comparison of CD with the "true" regression line AB demonstrates the potential for bias in estimated coefficients arising from non-response.

Recent developments in econometric methodology suggest ways of handling the problem of response bias when data on the variables affecting the probability of response (Z) are observed. Heckman (1976) shows that statistical models characterized by limited dependent variables, sample selection rules, or truncation points have a common structure, and suggests a simple method of estimating these models which we employ in this analysis.

Heckman's paper deals with the estimation of models like that specified in equations (1), (6), and (7). In an earlier paper (Heckman, 1974) he showed that maximum likelihood methods could be employed to consistently and efficiently estimate the parameters of this model. However, the likelihood method was found to be quite expensive. The more recent paper (Heckman, 1976) shows that consistent estimates can be obtained in a much less costly manner by recognizing the problem as an "omitted variable" problem. This can be seen as follows:

FIGURE A-1

ILLUSTRATED EFFECT OF SAMPLE CENSORING ON ESTIMATES OF REGRESSION PARAMETERS[a/]



[a/] Circled observations are those omitted from evaluation sample.

equation (1) for the i^{th} observation is

$$Y_i = X_i B + \varepsilon_i. \tag{12}$$

Taking expectations, given that the sample available is limited to those who respond ($R^* \geq 0$), gives

$$E\ (Y_i | R_i^* \geq 0) = X_i B + E\ (\varepsilon_i | R_i^* \geq 0). \tag{13}$$

If we assume that ε and η, the disturbance term in equation (6), follow a bivariate normal distribution, then it can be shown[1/] that

$$E\ (\varepsilon_i | R_i^* \geq 0) = \frac{\sigma_{12}}{(\sigma_{22})^{\frac{1}{2}}} \lambda_i, \tag{14}$$

where σ_{12} is the covariance between ε and η, σ_{22} is the variance of η, and

$$\lambda_i = \frac{f\ (Z_i \delta / \sigma_{22}^{\frac{1}{2}})}{F\ (Z_i \delta / \sigma_{22}^{\frac{1}{2}})}. \tag{15}$$

The denominator of λ_i is the probability that $R_i^* \geq 0$, i.e., the probability that the individual responds to the interview, while the numerator of λ_i is the standard normal density function, evaluated at the point $Z_i \delta / \sigma_{22}^{\frac{1}{2}}$.

Substituting (14) in (13) we have

$$E\ (Y_i | R_i^* \geq 0) = X_i B + \frac{\sigma_{12}}{(\sigma_{22})^{\frac{1}{2}}} \lambda_i. \tag{16}$$

Estimation of equation (12) on the sample of respondents will not take into account the final term in equation (16). Thus, the bias that arises from use of this "censored" sample exists solely because

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[1/] See Johnson and Kotz (1972), pp. 112-116.

the conditional mean of ε_i is omitted from the regression. The bias that results from use of respondent-only data may then be interpreted as arising from normal specification error. This interpretation suggests a simple solution: provide an instrument for the missing variable (λ_i) and estimate equation (16). Heckman (1976), in proposing this solution, suggests that if data on the variables Z determining the likelihood of response are available, an approximation to λ_i can be obtained by estimating a probit model of response, such as that implied by equations (6) and (7), and using the estimated coefficients to form $\hat{\lambda}$ for each observation. Equation (16) can then be readily estimated by ordinary least squares regression. Although the equation still must be fit only on data from respondents, any bias that this might impart to the coefficients, $\hat{B}$, is corrected for by inclusion of the λ_i term,[1/] if the assumptions of the model hold and λ is reliably estimated.

In the next section we develop and estimate a model to explain response to supported work interviews. Results from this estimation are used in the subsequent section to implement Heckman's approach.

[1/] The estimates of B are unbiased only asymptotically, since an estimate of λ_i must be substituted for the unobserved true value in the regression.

3. A MODEL OF THE PROBABILITY OF RESPONSE TO SUPPORTED WORK INTERVIEWS

The probability that an individual will respond is assumed to depend upon demographic characteristics, past and present behavior, and experience with the enrollment interview.

While this includes many of the same variables that were used as control variables in the outcome regressions (the results from which were reported in the body of this report), equations (9)-(11) indicate that all variables affecting outcomes should be included in the model for non-response, even if they are felt to have no direct impact on response probabilities. In addition, a number of variables that are assumed to have no impact on outcomes are felt to affect the probability of response. These include such items as the number of moves made during the two years prior to enrollment (since those moving are often the hardest to locate), some variables describing personal living arrangements, expected earnings if employed, whether the individual applied to Supported Work because of some agency pressure to find a job, and some indicators of the nature of the interviewing process itself, such as the length and location of the baseline interview. The final list of variables is contained in Table A-2.

Since the data on these causal variables are collected from the baseline interview, the parameters of the model of response to the follow-up interviews can be estimated. From equations (6) and (7), assuming η has a standard normal distribution, we have

TABLE A-2

VARIABLES AFFECTING PROBABILITY OF RESPONSE[1/]

FROM OUTCOME EQUATION SPECIFICATION USED IN TEXT:

- Sex
- Age (under 21, 21-35, over 35)
- Race (black, Hispanic, other)
- Education (less than 8 years, 8 to 12 years, over 12 years)
- Family Status (household size, marital status, whether dependents)
- Drug use history (whether used heroin regularly, any drug regularly, or were in treatment)
- Criminal record (number of arrests ever, whether in jail last year)
- Work Experience (longest job: none, less than one year, over one year)
- Enrollment date (before January 1976, January-June 1976, after June 1976)
- Eligibility for own target group
- Experimental status
- Site
- Length of site operation at enrollment

ADDITIONAL VARIABLES AFFECTING RESPONSE:

- Living arrangements (whether rent or own, whether live with parents, whether live in public housing)
- Number of moves last 2 years
- Whether applied for Supported Work job because of pressure by some agency to find a job
- Wage per week expected if employed
- Interview location (whether in office)
- Length of interview (in minutes)

[1/] Not all of these variables are relevant to each target group. Hence, model specifications will differ slightly for the four groups. For example, all AFDC recipients are females; hence, no sex variable is used. Also, AFDC mothers report almost no drug usage and arrest data were not asked of them.

$$P(R_i = 1) = P(R_i^* \geq 0)$$
$$= P(Z_i\delta + \eta_i \geq 0)$$
$$= P(\eta_i \leq Z_i\delta)$$
$$= \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{Z_i\delta} \exp(-\eta_i^2/2)\, d\eta_i.$$

Forming the likelihood function for the sample gives

$$L = \Pi_i [P(R_i = 1)]^{R_i} [1 - P(R_i = 1)]^{1-R_i}.$$

Estimates for the parameters of this probit model, δ, are those values that maximize L, and are readily obtained from a probit computer program.

Sample sizes used for this analysis, contained in Table A-3, range from 435 for youth to 1040 for ex-offenders. Table A-4 contains the estimated impact of each of the variables on the probability of responding to the two follow-up interviews.[1/] The major findings for each of the four target groups are summarized below.

a. AFDC: Women who applied to Supported Work due to pressure from some agency to find a job were significantly less likely to complete follow-up interviews. Those living in public housing and over age 35 were more likely to respond.

These results are based on simple t-tests of the coefficients. However, the overall fit of the model was quite poor. A chi-square statistic testing whether all coefficients are equal to zero could not

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[1/] It is easily shown that the effect of a change in variable Z_1 on the probability of response is $\delta_1 f(Z\delta)$, where δ_1 is the coefficient on Z_1 in equation (11) and f is the density function of the standard normal, evaluated at the point $Z\delta$. Since this impact clearly varies with the value of Z chosen, we compute the marginal impacts using the mean values for all variables in Z.

TABLE A-3

SAMPLE SIZES FOR ANALYSIS OF THE IMPACT OF NON-RESPONSE

	Observations Available[1]	Complete Observations[2]	Response Rate[3]	Observations for Regression[4]
AFDC	564	453	.81	365
Ex-addicts	1,043	783	.63	495
Ex-offenders	1,327	1,040	.55	575
Youth	533	435	.67	293

[1] These are the numbers of individuals enrolled prior to November 1976. These numbers are substantially smaller than those reported in Appendix B.

[2] These are the numbers of observations with data on all pre-enrollment characteristics needed for estimation of probit model and regression equations. Many of the omitted cases received early versions of the baseline interview.

[3] This column contains the proportions of column 2 observations with complete 9- and 18-month interviews. The proportions of column 1 observations with both interviews completed are nearly identical.

[4] These are the numbers of observations available for outcome analysis (responders only), equal to column 2 times column 3. These sample sizes are substantially smaller than those used in the analysis reported on in the main body of this report, due to the November 1976 cutoff date for enrollment used here, and to the exclusion of observations with missing data on pre-enrollment variables necessary for this analysis.

TABLE A-4

THE MARGINAL IMPACT OF PERSONAL AND PROGRAM CHARACTERISTICS ON

THE PROBABILITY OF RESPONSE

Variables	Target Group			
	AFDC[1]	Ex-addict	Ex-offender	Youth
Race (Blacks)				
White	10.2	-3.0	-12.9**	-27.5**
Hispanic	-3.5	-16.3**	6.8	-19.6**
Male	--	-2.9	-8.0	-11.2
Age (21-35)[2]				
Under 19	--	--	--	3.0
Under 21	--	1.6	-4.7	--
Over 35	8.4*	-7.4	.8	--
Education (8-12 years)				
Less than 8 years	-.1	11.2*	-10.8**	8.9
12 or more years	4.3	-.3	-4.3	--
+Household Size	1.4	.6	.8	-.1
Married	10.1	-3.8	-2.6	1.6
Any Dependents	-24.3	3.0	-5.8	1.9
Regular Use of Drugs - except marijuana	3.8	-7.2	2.5	.1
Regular Use of Heroin	14.0	7.4	.5	15.8
In Drug Treatment Last 6 Months	1.7	11.1*	-1.4	-22.1
+Number of Arrests	--	-.04	.00	-.23
In Jail Last Year	--	-6.4	--	-1.6
On Probation or Parole	--	-3.8	2.5	-3.4
Longest Job (None)				
Less than a year	1.8	7.2	-5.0	1.6
One year or longer	.5	7.8	-1.2	5.5
Had At Least 8 Weeks of Training	-1.7	3.2	.9	-.6
+Weeks Employed Year Prior to Enrollment	.04	.01	.1	-.03
Enrollment Date				
1/76-6/76	--	-3.7	-13.4	-48.5**
After 6/76	11.5	5.4	-17.1	-56.2**
Eligibility Status	6.8	2.4	-.2	9.2
Experimental Status (Experimental = 1)	-2.4	2.6	2.7	7.5
Site (Newark, for AFDC; Philadelphia for Other Target Groups)				
Atlanta	6.6	--	--	6.6
Chicago	-2.9	2.4	-9.7	--
Hartford	9.1	--	5.6	2.7
Jersey City	--	9.0*	6.7	-14.2
Newark	--	--	4.2	--
New York	-12.1	--	--	--
Oakland	-10.4	-11.6	-2.7	--
Philadelphia	--	--	--	--
San Francisco	--	--	-.8	--
Wisconsin	-8.7	--	--	--

TABLE A-4 (continued)

Variables	Target Group			
	AFDC[1]	Ex-addict	Ex-offender	Youth
+Length of Site Operation (months)	-1.2	-.1	.8	2.8
Living Arrangement (institution, other)				
Owns home	—	-1.3	12.1*	40.9**
Rents	—	.9	11.5**	25.6
Lives in other's home	—	-2.3	20.4**	33.2
Public Housing	10.6**	4.4	2.2	4.9
Lives with Parent	1.9	7.2	2.0	9.2
+Number of Moves Last 2 Years	-.9	-1.9	-1.9	1.1
Pressured to Find Job	-10.7**	1.9	1.2	4.0
+Expected Wage Per Week (hundreds of dollars)	-.9	2.0	-.6	6.4
Interview in Office	.4	2.0	-3.6	-13.7
+Length of Interview (hours)	-3.4	.1	7.3	-9.9

NOTE: The effect of a change in variable Z_1 on the probability of response $\delta_1 \cdot f(Z\delta)$, where δ_1 is the coefficient on Z_1 in equation (11) (the probit model) and f is the density function of the standard normal, evaluated at the point $Z\delta$. Since the estimated effect will clearly vary with the value of Z chosen, we compute the marginal impacts using the mean values for all variables in Z.

A few examples will best demonstrate the interpretation of these results. For continuous variables (those marked with + in the left hand margin), a change of one unit is predicted to lead to a change in the probability of responding equal to the value given, all other factors being equal. Thus, a youth whose baseline interview lasted 2 hours would be 9.9 percent less likely to respond than an otherwise identical youth whose baseline interview took only one hour. For discrete variables (those not marked with +), there may be two or more possible values. Race, for example, has three possible values (black, Hispanic, or white) while "married" has only two possible values (yes or no). For variables with only two possible values, the value given in the table is the difference in the probability of response for those who do and do not exhibit the given trait. Thus, a married AFDC recipient is 10.1 percent more likely to respond to an interview than an identical but unmarried AFDC member. For variables with three or more outcomes, the value given is the amount by which the predicted probability of response for individuals with the specified characteristic exceeds the expected response probability for those with the characteristic given in parentheses. Thus, white ex-offenders are 12.9 percent less likely to respond to interviews than black ex-offenders, holding other variables constant. To find the expected difference in probability of response between white and Hispanic AFDC members, subtract the tabled value for Hispanics from that given for whites. This yields a predicted probability of response for whites that is 6.1 percentage points smaller than the probability of response for Hispanics.

[1] Some variables used for the model of interview response are not available (such as arrest record), not applicable (such as sex), or contain too little variation to permit reliable estimation (such as the living arrangement variable). These excluded variables are marked with a —.

[2] Since all Supported Work youth are between the ages of 17 and 21, the excluded category for this target group is age 19 or older. For the other three target groups the age categories used are under 21, 21 to 35, and over 35.

*Coefficient estimate used in calculation of marginal impact is statistically significant at the 10 percent level (two-tailed test).

**Coefficient estimate used in calculation of marginal impact is statistically significant at the 5 percent level (two-tailed test).

+ indicates a continuous variable.

be rejected at even the 20 percent level of significance. Thus, we are not very confident of our ability to explain response probabilities for the AFDC target group. The fit for each of the other target groups was much better, with chi-square statistics all significant at the one percent level.

b. Ex-addicts: Hispanic ex-addicts were much less likely to respond to interviews than blacks. Those with very little (less than eight years) education were more likely to respond. This is in contrast with the results for ex-offenders. There were significant differences in response rates by site as well, with Jersey City enrollees being most likely and Oakland enrollees least likely to respond. Another interesting finding was that ex-addicts in drug treatment programs during the six months prior to baseline were more likely to respond to follow-up interviews.

c. Ex-offenders: White and poorly educated individuals were less likely than blacks and educated enrollees to respond. Those outside institutions, whether living in a home or renting, were considerably more likely to respond than those in institutions.

d. Youth: White and Hispanic youth were less likely to respond than blacks. This result is consistent with results for ex-addicts and ex-offenders. Also, those youth enrolling in Supported Work prior to January, 1976, were significantly more likely to respond than those entering later. As was found for ex-offenders, the place of residence at baseline was an important predictor of response. Individuals in institutions were much less likely to respond than those living in homes or renting.

e. All Target Groups: Comparison of these results across target groups reveals only two consistent findings: blacks are consistently more likely to respond than members of other racial groups, and those residing in institutions at baseline are consistently less likely than others to respond. Other significant results are peculiar to the specific target group.

Pre-enrollment values of outcome variables did not appear to be important predictors of response for any target group. Experimental status also did not appear to affect the likelihood of response. This is perhaps a little surprising, since controls may feel resentful that they were not selected for the program and so be more likely to refuse to cooperate. Also, Table A-1 shows that ex-addict and youth experimentals have substantially higher completion rates than the control groups for these two target groups. Nonetheless, while the estimates of the impact of status on completion rates for these two groups are approximately equal to the differences found in Table A-1, they are not statistically significant after controlling for other variables.

4. THE EFFECT OF NON-RESPONSE ON ESTIMATED PROGRAM EFFECTS

With the estimates of the parameters of the non-response model, we can construct the estimate of that part of the disturbance term in equation (12) which is correlated with the regressors Z. As explained in Section 2, this procedure yields a new variable, $\hat{\lambda}$, which can then be included as an additional regressor in the estimation of equation (12). Under the assumptions of the procedure, this regression produces unbiased estimates of the effect of experimental status (and control variables) on the outcome variable (Y) of interest, despite the fact that only data on responders is used in the regression. Comparison of these results with the estimates obtained with $\hat{\lambda}$ excluded provides evidence of whether or not analysis of data on responders only leads to biased inferences about the impact of Supported Work.[1/] While unadjusted estimates of program effects are given in the body of this report, we repeated the calculations on the sample analyzed here in order to assure that any differences between the adjusted and unadjusted estimates of program impact are due to the adjustment alone.

Many different outcome variables have been examined in the body of this report. In order to determine whether non-response bias is likely to be a problem we have selected a subset of the most important outcomes for examination. For each target group we examine the impact

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[1/] As pointed out in Section 2, the reliability of this evidence depends upon the validity of the assumptions involved in the model. Furthermore, while discrepancies between the alternative estimates suggest that there could well be non-response bias, a correspondence of the two sets of estimates may only indicate that the model of non-response is not good enough to permit detection of bias.

of Supported Work on hours worked during months 1-9, months 10-18, and months 16-18. We also examine for the youth, ex-addict, and ex-offender target groups, the effect of Supported Work on whether participants were arrested during months 1-9, months 10-18, and months 1-18 and whether drugs were used during the second 9-month period. For the AFDC sample, we investigate the effect of Supported Work on welfare income (excluding food stamps) during months 10-18.

The estimates of the impact of Supported Work with and without adjustment for possible non-response bias are contained in Table A-5. In most cases, the alternative estimates are quite similar. The most notable exceptions are for average hours worked per month during months 10-18 for ex-addicts and during months 16-18 for youth. The estimated experimental-control difference increased from 15 hours to 19 hours per month for ex-addicts--an increase of about 30 percent--after adjustment for non-response bias. For youth, prior to adjustment for bias, experimentals were estimated to work 16 fewer hours per month during months 16-18, a statistically significant result. After adjustment, the difference dropped to 12 hours and was no longer significant.

Since it is recognized that the impact of Supported Work may vary with program and individual characteristics, we have in this report allowed for such differences. These estimates have also been examined for non-response bias. Estimates of the impact of Supported Work seemed to vary more with site than with characteristics of individuals. Hence, we have estimated the effects of Supported Work on a few key outcomes by site, with and without correction for non-response bias.

TABLE A-5

ESTIMATES OF THE IMPACT OF SUPPORTED WORK WITH AND WITHOUT ADJUSTMENT FOR POSSIBLE RESPONSE BIAS

	AFDC		Ex-addict		Ex-offender		Youth	
Dependent Variable	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Average Monthly Hours								
Months 1-9	112.89**	112.44**	79.96**	82.06**	76.21**	77.54**	89.33**	90.56**
Months 10-18	52.37**	51.19**	15.49**	19.27**	10.21**	10.60**	-.69	3.12
Months 16-18	28.60**	27.70**	-4.15	3.33	4.01	3.93	-16.36*	-12.48
Months 1-18	82.63**	82.81**	47.72**	50.66**	43.21**	44.07**	44.32**	46.84**
Whether Arrested								
Months 1-9	-	-	-6.98*	-6.83*	-3.87	-4.65	-.14	-1.64
Months 10-18	-	-	-5.36	-4.33	2.54	3.00	-1.75	-3.29
Months 1-18	-	-	-12.60**	-11.92**	1.82	2.32	-1.65	-3.36
Whether Used Drugs								
Months 10-18	-	-	1.46	-.98	-.55	-.55	1.69	2.42
Average Monthly Welfare Income (excluding food stamps)								
Months 10-18	$ -69.13**	-64.40**	-	-	-	-	-	-
Sample Size	360		468		563		282	

Note: These estimates of program impact differ somewhat from those contained in the main text of this report since sample sizes are smaller here. The smaller sample sizes result from limiting the non-response analysis to those individuals who enrolled prior to November 1976, and for whom all necessary pre-enrollment variables are available.

The significance levels indicated for experimental effects after adjustment for non-response may not be strictly accurate, since the estimated standard errors used for these significance tests, obtained from the regression program, are biased if the covariance θ_{12} defined in equation (14) is not equal to zero. However, in practice the true test statistics are usually very close to the ones reported by the regression program. Hence the significance levels given here are indicative of the actual significance levels.

*Significant at the 10 percent level (two-tailed test).

**Significant at the 5 percent level (two-tailed test).

Table A-6 contains estimates of experimental-control differences, by site, in hours worked and welfare income for the 10-18 month period for the AFDC target group. Table A-7 contains estimated differences for the other three target groups in hours worked, percent arrested, and percent who used drugs (other than marijuana) for months 10-18, by site. Examination of these tables shows that accounting for possible non-response bias leads to few changes in estimated program impacts. The most substantive change occurs in the estimate of Supported Work's impact on hours worked by ex-addicts in Jersey City. Prior to controlling for non-response, the estimated experimental effect was 14 hours per month. Controlling for non-response, the estimate increased to 21 hours per month, an increase of 50 percent. Furthermore, while the experimental impact was not originally statistically significant, the adjusted, higher estimate is significantly different from zero at the five percent level. This change was atypical, however. Other results changed only marginally after adjustment, or remained small and insignificant despite larger proportionate changes.

Experimental effects were also calculated using a procedure which takes account of the possibility that program effectiveness may vary with length of site operation. As can be seen from Table A-8, the estimated coefficients on the two experimental variables (a binary experimental status variable and a status-length-of-site-operation interaction term) change very little when the effects of non-response are controlled for. Thus, for any length of site operation, the estimate of the impact of Supported Work will be virtually unaffected by the non-response adjustment.[1/]

[1/] Estimates of the impact of Supported Work in which program effect was assumed to vary with enrollment date were also examined for evidence of non-response bias. Only three of the 31 estimates changed substantively, the largest change being a 33 percent increase in the experimental-control differential in hours worked in months 10 to 18 by youth enrolled after June 1976.

TABLE A-6

EFFECTS OF SUPPORTED WORK ON HOURS WORKED AND WELFARE INCOME OF AFDC RECIPIENTS IN MONTHS 10-18, BY SITE, BEFORE AND AFTER ADJUSTMENT FOR POSSIBLE NON-RESPONSE BIAS

Site	Average Hours Worked Per Month, Months 10-18		Average Monthly Welfare Received, Months 10-18	
	Unadjusted	Adjusted	Unadjusted	Adjusted
Atlanta	59.27**	59.52**	-14.46	-15.35
Chicago	23.57*	22.14*	.10	5.11
Hartford	29.45	27.87	12.20	17.73
Newark	81.69**	79.93**	-156.95**	-150.75**
New York	58.30**	56.81**	-110.94**	-105.74**
Oakland	63.67**	63.44**	-100.93**	-100.15**
Wisconsin	10.77	8.78	-17.47	-10.48

NOTE: These estimates of program impact differ somewhat from those contained in the main text of this report since sample sizes are smaller here. The smaller sample sizes result from limiting the non-response analysis to those individuals who enrolled prior to November, 1976, and for whom all necessary pre-enrollment variables are available.

The significance levels indicated for experimental effects after adjustment for non-response may not be strictly accurate, since the estimated standard errors used for these significance tests, obtained from the regression program, are biased if the covariance σ_{12} defined in equation (14) is not equal to zero. However, in practice the true test statistics are usually very close to the ones reported by the regression program. Hence the significance levels given here are indicative of the actual significance levels.

*Significant at the 10 percent level (two-tailed test).

**Significant at the 5 percent level (two-tailed test).

TABLE A-7

EFFECTS OF SUPPORTED WORK ON HOURS WORKED, ARRESTS, AND DRUG USE, IN MONTHS 10-18 FOR EX-ADDICTS, EX-OFFENDERS, AND YOUTH, BY SITE, BEFORE AND AFTER ADJUSTMENT FOR POSSIBLE NON-RESPONSE BIAS

	Average Hours Worked Per Month, Months 10-18		Percent Arrested Months 10-18		Percent Used Drugs Months 10-18	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Ex-addicts						
Chicago	12.22	15.66	-2.82	-1.84	9.23	7.73
Jersey City	14.45	20.90**	-1.92	-0.08	-3.65	-6.47
Oakland	27.63	26.93	-24.11*	-24.31*	-8.47	-8.16
Philadelphia	13.85	18.79	-8.39	-6.98	2.14	-0.02
Ex-offenders						
Chicago	26.16	27.10*	-9.85	-9.12	-8.54	-8.89
Hartford	-0.45	0.001	-3.90	-3.55	-3.19	-3.35
Jersey City	6.03	5.97	15.11	15.06	4.50	4.52
Newark	14.54	14.99	7.20	7.55	-2.38	-2.54
Oakland	-4.65	-4.13	3.30	3.70	12.12	11.93
Philadelphia	11.18	11.23	0.99	1.03	-12.58	-12.59
San Francisco	24.42	24.68	7.27	7.47	-5.83	-5.92
Youth						
Atlanta	-16.85	-10.01	-3.79	-6.41	-12.20	-11.72
Hartford	-7.82	0.84	-2.53	-5.88	1.50	2.18
Jersey City	0.51	-0.67	0.80	1.25	-5.28	-5.37
Philadelphia	21.98	22.25	-4.58	-4.69	16.99	17.01

TABLE A-7 (Continued)

NOTE: These estimates of program impact differ somewhat from those contained in the main text of this report since sample sizes are smaller here. The smaller sample sizes result from limiting the non-response analysis to those individuals who enrolled prior to November 1976, and for whom all necessary pre-enrollment variables are available.

The significance levels indicated for experimental effects after adjustment for non-response may not be strictly accurate, since the estimated standard errors used for these significance tests, obtained from the regression program, are biased if the covariance σ_{12} defined in equation (14) is not equal to zero. However, in practice the true test statistics are usually very close to the ones reported by the regression program. Hence the significance levels given here are indicative of the actual significance levels.

*Significant at the 10 percent level (two-tailed test).

**Significant at the 5 percent level (two-tailed test).

TABLE A-8

ESTIMATED COEFFICIENTS OF EXPERIMENTAL STATUS VARIABLE AND OF STATUS x LENGTH-OF-SITE-OPERATION INTERACTION TERM, MONTHS 10-18, BEFORE AND AFTER ACCOUNTING FOR POSSIBLE NON-RESPONSE BIAS

	AFDC		Ex-addicts		Ex-offenders		Youth	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
Average Hours Worked Per Month								
Status	106.52**	106.66**	52.43**	56.48**	18.94	19.26	89.25**	88.49**
Status x Site Operation	-4.05**	-4.16**	-2.81*	-2.80*	-0.67	-0.67	-7.14**	-6.75**
Percent Arrested								
Status	n.a.	n.a.	-13.71	-12.82	16.82	16.69	-17.71	-17.44
Status x Site Operation	n.a.	n.a.	0.63	0.64	-1.43	-1.43	1.25	1.14
Whether Used Drugs								
Status	n.a.	n.a.	39.50**	37.78**	6.84	7.27	-11.56	-11.62
Status x Site Operation	n.a.	n.a.	-2.91**	-2.94**	-0.34	-0.34	0.97	1.00
Average Monthly Welfare Income								
Status	-173.13**	-173.67**	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Status x Site Operation	7.81**	8.23**	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

NOTE: These estimates of program impact differ somewhat from those contained in the main text of this report since sample sizes are smaller here. The smaller sample sizes result from limiting the non-response analysis to those individuals who enrolled prior to November 1976, and for whom all necessary pre-enrollment variables are available.

The significance levels indicated for experimental effects after adjustment for non-response may not be strictly accurate, since the estimated standard errors used for these significance tests, obtained from the regression program, are biased if the covariance σ_{12} defined in equation (14) is not equal to zero. However, in practice the true test statistics are usually very close to the ones reported by the regression program. Hence the significance levels given here are indicative of the actual significance levels.

*Significant at the 10 percent level (two-tailed test).

**Significant at the 5 percent level (two-tailed test).

n.a. means not analyzed.

5. CONCLUSION

This appendix has shown how estimates of the impact of Supported Work may be biased due to the necessary restriction of the analysis to those individuals responding to follow-up interviews. Examination of the changes in the estimates of overall experimental-control differences by target group resulting from adjustment for non-response suggests that there is little evidence of bias due to non-response. When results were disaggregated by site, length of site operation, and enrollment date, controlling for the possible effects of non-response led to a sizeable change in the estimate of Supported Work's impact for a small proportion of the examples given here. These results lead us to conclude that, while the possibility exists that some of our estimates of the impact of Supported Work suffer from non-response bias, there is no evidence to suggest that such bias is pervasive, systematic, or likely to be very large in specific instances. We will continue to examine our results for evidence of non-response bias, particularly those for which Supported Work's impact is disaggregated by subgroup. The methodology outlined here will enable us, under the assumptions specified, to obtain reliable estimates despite the presence of non-response bias.

APPENDIX B

RESPONSE TO THE 18-MONTH INTERVIEW

The Supported Work sample was designed with great care to ensure that those selected to participate in the program did not differ in important respects from those who formed the comparison group. Thus, comparisons of experimental and control groups should yield unbiased estimates of the impact of Supported Work. However, not all enrollees complete the scheduled interviews, and this affects estimates of experimental-control differences in two ways; first, the loss of observations reduces the statistical precision of the estimates, and second, if the probability of non-response for individuals is related to an outcome variable, the estimate of the effect of Supported Work on that outcome may be biased. For this reason, we continually monitor response rates to scheduled interviews, and periodically we compare the characteristics of responders with non-responders in an effort to identify ways to improve our fielding procedures and to alert us to differential response rates among sample subgroups that may impact the evaluation results. This appendix contains basic statistics on the number of 18-month interviews assigned and proportions completed at each Supported Work site, for each target group, and for experimentals and controls. It also notes differences in response rates among groups with differing demographic characteristics.[1/] The sample analyzed here is larger than those in the text of the report and in Appendix A; this Appendix reports on the most current data on field completions and incompleted assignments.

[1/] A previous project report (Jackson, 1978), presented the results of a similar analysis of a large sample of 9-month assignments.

1. RESPONSE RATES BY EXPERIMENTAL STATUS, TARGET GROUP AND SITE

Between October 1976, the first month of 18-month interviewing, and September 1978, 5,655 sample members became due for 18-month interviews. This represents 86 percent of the full evaluation sample.[1/] Table B-1 displays the breakdown of interviews scheduled by site and target group. The 18-month sample through September is fairly representative of the full baseline sample with only a small overrepresentation of Jersey City and Philadelphia, the first two sites to be operational, and a slight underrepresentation of the sites which started-up later. AFDC is slightly underrepresented in the sample considered here since this target group was enrolled into the sample in the highest proportions toward the end of the enrollment period.

Table B-2 displays the final status of assigned interviews for experimentals and controls, for the different target groups, and for the various sites. Although 69 percent of all assigned 18-month interviews were completed, substantial differences between subgroups exist. Experimentals have significantly higher completion rates (3.6 percentage points higher) than controls. However, since controls have a slightly higher percentage of interviews whose final status is not yet known, the disparity may be somewhat smaller for the full 18-month sample. Experimentals have a slightly lower rate of refusals and interviews not

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[1/] Not all of these people could be included in the analysis reported in the body of this paper. We generated a research file in September 1978 for that analysis. Generally, most interviews assigned to the field after May were unlikely to have been completed in time to be entered on the research file although some early completions of later months' assignments were included.

Table B-1

ALLOCATION OF THE ASSIGNED SAMPLE SCHEDULED TO RECEIVE AN 18-MONTH INTERVIEW THROUGH SEPTEMBER 1978, BY TARGET GROUP AND SITE

Site	AFDC		Ex-Addict		Ex-Offender		Youth		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Atlanta	127	9.9	n.a.	n.a.	n.a.	n.a.	68	6.6	195	3.4
Chicago	218	17.1	270	19.6	289	14.7	n.a	n.a.	777	13.7
Hartford	123	9.6	n.a.	n.a.	273	13.8	488	47.1	884	15.6
Jersey City	n.a.	n.a.	505	36.6	219	11.1	246	23.7	970	17.1
Newark	248	19.4	n.a.	n.a.	323	16.4	n.a.	n.a.	571	10.1
New York	415	32.5	n.a.	n.a.	n.a.	n.a.	132	12.7	547	9.7
Oakland	115	9.0	122	8.8	379	19.2	n.a.	n.a.	616	10.9
Philadelphia	n.a.	n.a.	482	35.0	230	11.7	102	9.8	814	14.4
San Francisco	n.a.	n.a.	n.a.	n.a.	259	13.1	n.a.	n.a.	259	4.6
Wisconsin	32	2.5	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	32	0.6
Total	1278	100.0	1379	100.0	1972	100.0	1036	100.0	5665	100.0

n.a. = not applicable.

Table B-2

PERCENTAGE DISTRIBUTION OF FINAL STATUSES ON THE 18-MONTH INTERVIEWS BY EXPERIMENTAL STATUS, TARGET GROUP, AND SITE

	Number Assigned	Completed	Refused	Moved Out of Area	Other Moved	Incarcerated	Deceased	Other[a] Retired	Status Pending (Holds)
Total	5665	68.5%	2.1%	1.9%	6.0%	1.7%	1.3%	9.1%	9.5%
Experimental Status									
Experimentals	2759	70.4	1.5	1.8	5.9	1.3	1.4	8.9	8.7
Controls	2906	66.8	2.6	2.0	6.0	2.0	1.1	9.2	10.3
Target Group									
AFDC	1278	78.5	3.8	1.3	2.3	0.0	0.0	2.8	11.3
EX-Addicts	1379	67.3	1.7	1.5	6.5	1.4	2.1	14.4	5.1
Ex-Offenders	1972	63.3	1.8	2.5	9.1	3.7	1.7	9.6	8.3
Youth	1036	67.9	1.0	2.0	4.0	0.4	0.9	8.5	15.4
Site									
Atlanta	195	76.4	4.1	0.0	2.1	0.5	0.0	0.5	16.4
Chicago	777	70.0	3.5	1.3	12.0	2.4	1.3	4.2	5.3
Hartford	884	68.1	0.5	2.6	3.7	0.6	0.3	10.6	13.6
Jersey City	970	71.9	1.5	2.0	4.6	1.0	2.1	10.1	6.8
Newark	571	71.3	2.1	1.4	4.4	1.2	0.5	9.1	10.0
New York	547	70.0	2.9	0.9	2.4	0.0	0.2	1.5	22.1
Oakland	616	63.3	1.6	3.7	8.0	4.9	2.3	9.3	7.0
Philadelphia	814	65.0	2.2	0.6	4.8	0.6	1.8	19.7	5.3
San Francisco	259	59.5	2.3	5.4	14.3	6.9	1.9	3.9	5.8
Wisconsin	32	87.5	3.1	3.1	3.1	0.0	0.0	0.0	3.1

NOTE: Chi-square statistics indicate that the sample distribution by experimental status, target group, and site are all significant at the one percent level or higher on a two-tailed test.

[a] "Other retired" consists primarily of individuals who could not be located or who repeatedly failed to keep interview appointments.

completed because of incarceration. The difference in completion percentages between experimentals and controls was found to be less for the 18-month than for the 9-month interviews (Jackson, 1978). This is due, in part, to the fact that most experimentals will have left the program by the time of the 18-month interviews and, thus, we lose the assistance of Supported Work in locating them.

Target group comparisons of final status indicate that the completion percentage for the AFDC target group was substantially higher than that for the other target groups. Approximately 79 percent of the AFDC target group had completed 18-month interviews (with another 11 percent still pending a final status), compared to 63 percent of ex-offenders, 67 percent of ex-addicts, and 68 percent of the youth (15 percent of whose interviews were still on hold). However, the AFDC group was more likely to refuse to be interviewed than any other target group--a result which has been consistent throughout the study, especially for AFDC control group members. On the other hand, fewer of their interviews were retired because of moving, incarceration, or death. In part, the higher rate of refusals among AFDC controls may be due to their greater disappointment with being denied participation in the Supported Work program and their subsequent rejection of all contact with the program. Also, since AFDC members have generally been easier to locate than other target groups, they are more likely to have the opportunity to refuse to be interviewed than other groups. Eighteen-month interviews scheduled for ex-offenders were more likely than interviews scheduled for members of other target groups to be retired because the individual had moved or was incarcerated. This finding supports impressions

by field staff that the ex-offenders tend to be more mobile and thus harder to locate than the other groups. Interviews are conducted in many prisons; however, since some institutions are located a considerable distance from the relevant site office, some interviews assigned to persons in prison could not be completed. Eventually, these uncompleted interviews are retired.

Ex-addicts had a substantially higher number of interviews retired for "other reasons," which usually reflects either our inability to confirm the whereabouts of a sample member (whether he or she has moved or not) or a continuing series of failures to obtain an interview with the respondent within the allotted 3-month time period. The latter situation often occurs when the respondent has been located but continues to avoid interviewers and yet has not refused outright to be interviewed.

The substantially higher proportion of the AFDC and youth target groups which are still pending a final status assignment is probably due to these two target groups having higher volumes of enrollment during the later months under study. Thus, a larger share of the interviews assigned for these groups still may be completed before having to be retired.

Site differences in 18-month final statuses are significant; no doubt, they interact with target group differences and the sample size and composition at each site. The West Coast sites--Oakland and San Francisco--have the lowest overall completion percentages; the two smallest sites--Wisconsin and Atlanta--have the highest. New York's large volume of pending interviews reflects recent sample assignments in that site. Its final completion percentage is expected to be well above its current 70 percent.

Some of the site differences in reasons for non-response may reflect variation in reporting across sites; nonetheless, certain patterns are worthy of note. San Francisco, Oakland, and Chicago retired a substantial number of interviews due to respondents having moved. In San Francisco, where all sample members are ex-offenders, nearly 20 percent of the respondents were retired because they had moved and could not be located at a new address. For the populations included in this study, information as to the whereabouts of persons who have moved is neither very reliable nor readily available. Also, both Oakland and San Francisco reported much higher proportions of their samples being retired because the respondents were incarcerated. Certain institutions in California were especially reluctant to grant permission for us to interview there.[1/]

Completion percentages of experimentals and controls were cross-tabulated by target and site to allow more detailed analysis of interactions of these various factors. Table B-3 displays completion percentages for experimentals and controls in each of the four target groups. As stated previously, experimentals tend to have higher completion rates than controls, and the differences are significant for AFDC and youth samples. AFDC controls refused interviews more frequently than controls in other target groups, and youth controls appear to be much more difficult than experimentals to locate, partly because of the assistance

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[1/] More recently, we have gained permission to conduct interviews in most prisons where sample members are currently living.

Table B-3

PERCENTAGE OF THE ASSIGNED SAMPLE RESPONDING TO THE 18-MONTH INTERVIEW, BY EXPERIMENTAL STATUS AND TARGET GROUP

	Experimental Status		Total	
	Experimentals	Controls	Percent	Number
Target Group				
AFDC**	81	76	78	1003
Ex-Addict	68	67	67	928
Ex-Offender	64	63	63	1250
Youth**	72	64	68	703
Total**	70	67	69	3884

**Experimental-control difference is statistically significant at the 5 percent level on a two-tailed test.

which was available from the Supported Work program for youth experimentals.

Table B-4 displays completion rates for experimental and controls in the various sites. These data indicate that in Atlanta, New York, and Oakland, experimentals responded at a significantly higher rate than controls. These three sites account for over 50 percent of the total AFDC sample, and Atlanta and New York have nearly 20 percent of the youth target group.

Comparison of completion rates for the various target groups within a site (Table B-5) indicate that there tends to be more homogeneity in response rates within a target group than among target groups in the same site. For example, we observe a relatively low rate of completions of ex-offender interviews in Chicago, compared to Chicago's completion rates for other target groups.

Table B-4

PERCENTAGE OF THE ASSIGNED SAMPLE RESPONDING TO THE 18-MONTH INTERVIEW, BY EXPERIMENTAL STATUS AND SITE

	Experimental Status		Total	
	Experimentals	Controls	Percent	Number
Site				
Atlanta**	86	67	76	149
Chicago	71	70	70	544
Hartford	69	67	68	603
Jersey City	71	72	72	697
Newark	71	72	71	407
New York**	76	64	70	383
Oakland*	67	60	63	390
Philadelphia	67	63	65	529
San Francisco	64	55	59	154
Wisconsin	75	100	88	28
Total**	70%	67%	69%	3884

*Experimental-control difference is statistically significant at the 10 percent level on a two-tailed test.

**Experimental-control difference is statistically significant at the 5 percent level on a two-tailed test.

Table B-5

PERCENTAGE OF THE ASSIGNED SAMPLE RESPONDING TO THE 18-MONTH INTERVIEW, BY SITE AND TARGET GROUP

	Target Group				Total	
	AFDC	Ex-Addict	Ex-Offender	Youth	Percent	Number
Site						
Atlanta	80.3	n.a.	n.a.	69.1	76.4	149
Chicago	83.5	71.9	58.1	n.a.	70.0	544
Hartford	77.2	n.a.	65.9	67.2	68.1	603
Jersey City	n.a.	71.1	71.7	73.6	71.9	697
Newark	79.4	n.a.	65.0	n.a.	71.3	407
New York	74.9	n.a.	n.a.	54.5	70.0	383
Oakland	76.5	55.7	61.7	n.a.	63.3	390
Philadelphia	n.a.	63.7	63.9	73.5	65.0	529
San Francisco	n.a.	n.a.	59.5	n.a.	59.5	154
Wisconsin	87.5	n.a.	n.a.	n.a.	87.5	28
Total	78.5	67.3	63.3	67.9	68.5	3884

2. RESPONSE RATES BY SELECTED DEMOGRAPHIC CHARACTERISTICS

We also examined selected demographic characteristics of the sample at the time of enrollment to determine their relationships to response rates. Completion percentages for the sample by race, marital status, education, sex, and living arrangements are presented in Table B-6. All of the variables except education showed significant differences in the completion rates for various subgroups.

As we have seen before, black sample members have a rate of response substantially higher than the other ethnic/racial groups, a finding that is atypical of most survey results. Emphasis on recruiting and hiring minority interviewing staff, especially blacks, higher turnover among Hispanic interviewers in some sites, and seemingly greater reluctance among white respondents to continue to be involved in the study have all appeared to contribute to higher response rates for blacks and lower rates for whites and Hispanics. Unmarried sample members and females had substantially higher completion rates than married and male groups. These results are likely to be related to the higher completion rates among the AFDC and youth target groups since the AFDC group is all female and both groups had relatively high proportions of unmarried persons.

The completion percentages for sample members living in different types of housing at the time of their enrollment showed, not surprisingly, that persons who lived in houses or apartments rather than rooms, institutions, or other arrangements were much more likely to respond to the 18-month follow-up interview. Field experience indicates that respondents who lived in places other than houses or apartments at baseline

Table B-6

COMPLETION RATES FOR 18-MONTH INTERVIEWS

BY SELECTED DEMOGRAPHIC VARIABLES

	Number Assigned	Percent Completed of Total Assigned
Total	5665	68.5
Race***		
Black	4205	71.7
Hispanic	674	58.5
White and Other	556	59.5
Marital Status***		
Married	644	64.4
Not Married	4890	69.6
Education Completed		
Under 12 Years	3910	68.4
12 Years or Over	1691	68.2
Sex***		
Male	3825	65.4
Female	1840	75.0
Type of Dwelling***		
House	1603	72.3
Apartment	3307	70.6
Room	227	49.3
Other	414	54.1
Public Housing Status***		
Public Housing	1284	75.7
Non-Public Housing	4381	66.4

NOTE: Demographic variables were measured in pre-enrollment ("baseline") interviews.

***Chi-square statistic for the distribution of this variable is significant at the one percent level. This indicates that the distribution of responders and non-responders varies signficantly among the subgroups listed.

tended to be highly transient, and furthermore, these other residential arrangements were usually rooming houses, YMCA hotels, or halfway houses which could provide little information about moved respondents' whereabouts. The lower completion rates for individuals with these less stable living arrangements are consistent with the lower completion rates among ex-offenders and ex-addicts, who were most likely to report living in these settings at baseline (Jackson et al., 1978). For example, in Chicago and San Francisco, sites in which ex-offenders have especially low completion rates (less than 60 percent in each), 38 percent and 25 percent, respectively, of the ex-offenders lived in housing types other than houses or apartments at the time of their baseline interview.

In addition, respondents who lived in public housing at baseline responded at a significantly higher rate than non-public-housing residents. This result is likely to be partially due to the higher percentage of AFDC and youth sample members who lived in public housing at baseline (36 and 26 percent, respectively)--especially in Atlanta, one of the most successful interviewing sites.

3. SUMMARY

These data indicate that, while the response rate on 18-month interviews is relatively high (69 percent), especially in light of the characteristics of the sample, the responders are not representative of the full sample of enrollees. A higher percentage of the responders are black; single; female; and live in places other than houses or apartments. Non-response is most common among the ex-offender target group and in San Francisco and Oakland. This information is useful input into fielding decisions and also provides some insights as to the importance of conducting analyses of the effects of non-response on the evaluation results, such as those presented in Appendix A.

APPENDIX C

MEANS AND STANDARD DEVIATIONS

OF CONTROL VARIABLES

TABLE C.1

MEANS OF CONTROL VARIABLES USED IN REGRESSION EQUATIONS

(Where appropriate, standard deviations are in parentheses)

Variable	Target Group			
	AFDC	Ex-addict	Ex-offender	Youth
Site				
Atlanta	.112	n.a.	n.a.	.035
Chicago	.195	.220	.144	n.a.
Hartford	.070	n.a.	.130	.449
Jersey City	n.a.	.385	.133	.319
Newark	.242	n.a.	.166	n.a.
New York	.291	n.a.	n.a.	.072
Oakland	.052	.058	.165	n.a.
Philadelphia	n.a.	.337	.126	.126
San Francisco	n.a.	n.a.	.136	n.a.
Wisconsin	.038	n.a.	n.a.	n.a.
Experimental Status				
Experimental	.512	.528	.481	.486
Control	.488	.472	.519	.514
Age				
Younger than 19	n.a.	n.a.	n.a.	.576
Younger than 21	.007	.069	.179	n.a.
Older than 19	n.a.	n.a.	n.a.	.424
21 through 35	.588	.815	.750	n.a.
Older than 35	.405	.117	.072	n.a.
Education				
8 or fewer years	.173	.153	.126	.168
9 to 11 years	.524	.576	.622	.824
12 or more years	.303	.271	.252	.008

TABLE C.1 (Continued)

Variable	Target Group			
	AFDC	Ex-addict	Ex-offender	Youth
Sex				
Male	.000	.808	.947	.885
Female	1.000	.192	.053	.115
Race/Ethnicity				
White	.061	.144	.069	.072
Black	.833	.785	.841	.790
Hispanic	.101	.070	.088	.136
Marital Status				
Married	.030	.234	.128	.044
Not married	.970	.766	.872	.956
Dependents				
Some	.973	.397	.199	.084
None	.027	.603	.801	.916
Household Size	3.790	3.639	3.865	5.012
Children Younger Than 12				
One or more	.736	.264	.120	.051
None	.264	.736	.880	.949
Eligibility Status				
Met all criteria	.842	.797	.825	.713
Did not meet all criteria	.158	.203	.175	.287
Length of Site Operation (in months)	13.404 (4.117)	13.237 (4.872)	13.250 (4.737)	12.946 (4.861)

TABLE C.1 (Continued)

Variable	Target Group			
	AFDC	Ex-addict	Ex-offender	Youth
Weeks Worked in Prior Year	3.503	10.383	5.618	9.725
	(9.574)	(14.371)	(10.373)	(12.016)
Longest Job Ever				
None	.164	.047	.122	.232
Less than 12 months	.284	.397	.513	.696
12 or more months	.552	.556	.365	.072
Job Training in Prior Year				
Less than 8 weeks	.938	.904	.813	.893
8 or more weeks	.062	.096	.187	.107
Earnings Prior Month (dollars)	18.306	102.055	46.773	66.751
	(56.526)	(180.854)	(102.224)	(94.249)
Total Income Prior Month (dollars)	385.450	229.498	108.552	123.397
	(129.639)	(225.574)	(143.494)	(111.837)
Monthly Welfare Income (dollars)	281.869	82.100	28.554	18.016
	(106.633)	(114.580)	(71.545)	(61.553)
Monthly Food Stamp Bonus Value (dollars)	73.659	20.186	12.818	16.116
	(41.185)	(33.208)	(29.964)	(32.217)
Monthly Unemployment Compensation (dollars)	2.803	14.080	6.304	4.938
	(25.203)	(68.647)	(41.317)	(32.588)
Monthly Food Stamp Bonus Plus Welfare (dollars)	355.575	103.733	44.367	39.006
	(119.268)	(131.559)	(81.856)	(74.898)

TABLE C.1 (Continued)

Variable	Target Group			
	AFDC	Ex-addict	Ex-offender	Youth
Monthly Income from Other Sources (dollars)	8.843 (39.645)	8.719 (62.406)	5.613 (40.286)	6.084 (34.781)
Received Welfare Income	.999	.413	.200	.110
Received Food Stamps	.935	.340	.224	.231
Received Welfare or Food Stamps	.999	.529	.343	.308
Used Heroin Ever	n.a.	.948	.435	.098
Used Other (Non-Heroin) Opiates	n.a.	.694	.262	.084
Used Cocaine	n.a.	.676	.384	.148
Used Marijuana	n.a.	.902	.771	.716
Used Any Drug	n.a.	.984	.628	.253
Used Alcohol	n.a.	.723	.742	.724

TABLE C.1 (Continued)

Variable	Target Group			
	AFDC	Ex-addict	Ex-offender	Youth
Used Heroin Regularly	n.a.	.872	.308	.033
Used Any Drug Regularly	n.a.	.899	.363	.050
Drug Treatment				
In treatment	n.a.	.909	.108	.012
Not in treatment	n.a.	.091	.892	.988
Number of Arrests	n.a.	8.105	8.972	2.180
		(10.736)	(13.191)	(3.447)
Months Since Last Incarcerated				
Never incarcerated	n.a.	.296	.029	.687
Within 12 months	n.a.	.292	.904	.168
More than 12 months	n.a.	.412	.067	.145
Parole/Probation Status				
On parole or probation	n.a.	.382	.368	.258
Not on parole or probation	n.a.	.618	.632	.742

n.a. = not applicable.

REFERENCES

Carcagno, G. and Corson, W. "Welfare Reform." In The 1978 Budget: Setting National Priorities, edited by J. Pechman. Washington, D.C.: The Brookings Institution, 1977.

Dickinson, K. and Behrens, J. "The Effects of Supported Work on Drug Use: Results from an Early Sample with 18-Months of Post-Enrollment Data," Unpublished Paper. Princeton, New Jersey: Mathematica Policy Research, 1977.

Dupont, R. "Drug Abuse Scene: Past, Present and Future." Presented at the National Drug Abuse Conference. Seattle, Washington, April, 1978.

Heckman, J. "The Common Structure of Statistical Models of Truncation, Sample Selection, and Limited Dependent Variables and a Simple Estimator for Such Models." Annals of Economic and Social Measurement 5 (Fall 1976): 475-492.

Heckman, J. "Shadow Price, Market Wages and Labor Supply," Econometrica 42 (July 1974): 674-694.

Heilbrun, J. Urban Economics and Public Policy. New York: St. Martin's Press, 1973.

Hollister, R. et al. "Guidelines for Setting Wages in Supported Work." Working Paper No. C-3. Princeton, New Jersey: Mathematica Policy Research, 1974.

Hannan, T. The Economics of Methodone Maintenance. Lexington, Mass.: Lexington Books, 1975.

Hutchens, R. "Changes in AFDC Tax Rates, 1967-71." Journal of Human Resources 13 (Winter 1978): 60-74.

Jackson, R. "Non-Response in the Supported Work Follow-Up Interviews: Results From an Analysis of Partial 9-, 18-, and 27-Month Samples." Unpublished Paper. Princeton, N.J.: Mathematica Policy Research, 1978.

Jackson, R. et al. The Supported Work Demonstration's Research Sample: Characteristics at Enrollment. Princeton, N.J.: Mathematica Policy Research, forthcoming.

Johnson, A. "Housing Consumption." In The Rural Income Maintenance Experiment, vol. V, Consumption Behavior and Nonwork Response. Madison, Wisconsin: Institute for Research on Poverty, University of Wisconsin, 1976.

Johnson, N. and Kotz, S. Distribution in Statistics: Continuous Multivariate Distributions. New York: Wiley and Sons, 1972.

Levitan, S. Programs in Aid of the Poor. Baltimore: John Hopkins University Press, 1976.

Levitan S. and Belous, R. "Reduced Worktime: An Alternative to High Unemployment." In Job Creation: What Works?, edited by R. Taggert. Salt Lake City: Olympus Publishing Company, 1977.

Maynard, R. et al. Analysis of Nine-Month Interviews for Supported Work: Results of An Early AFDC Sample. New York: Manpower Demonstration Research Corporation, 1977.

Masters, S. et al. Analysis of Nine Month Interviews for Supported Work: Results of an Early Sample. New York: Manpower Demonstration Research Corporation, 1977.

MDRC. First Annual Report on the Supported Work Demonstration. New York: Manpower Demonstration Research Corporation, 1976.

MDRC. Second Annual Report on the National Supported Work Demonstration. New York: Manpower Demonstration Research Corporation, April 1978.

Osterman, P. "Youth, Work and Unemployment," Challenge, May/June 1978, pp. 65-69.

Peck, J. "The Problem of Attrition," In The New Jersey-Pennsylvania Graduated Work Incentive Experiment Final Report, edited by H. Watts and A. Rees. Madison, Wisconsin: Institute for Research on Poverty, University of Wisconsin, 1973.

Schiller, B. et al. "The Impact of WIN II: A Londitudinal Evaluation of the Work Incentive Program (WIN)." Pacific Consultants, 1976.

Schore, J. et al. "Arrest Histories for a Subsample of Supported Work Interviewees: The Problem of Response Error." Unpublished Paper. Princeton, N.J.: Mathematica Policy Research, 1978.

Storey, J. Studies in Public Welfare, Paper Number 15. Washington, D.C.: U.S. Government Printing Office, 1974.

Wooldridge, J. "Housing Consumption." In The New Jersey Income Maintenance Experiment, vol. III: Expenditures, Health, and Social Behavior; and the Quality of the Evidence, edited by H. Watts and A. Rees. New York: Academic Press, 1977.

U.S. Bureau of Census. Current Population Reports, Series P-60, No. 115, "Characteristics of the Population Below the Povery Level: 1976," Washington, D.C.: U.S. Government Printing Office, 1978.

U.S. Bureau of Labor Statistics. BLS Handbook of Methods. Washington, D.C.: U.S. Government Printing Office, 1976.

U.S. Department of Health Education and Welfare. National Institute on Drug Abuse: Statistical Series, SMSA Statistics 1976, Series E, Number 3. Washington: National Institute of Drug Abuse, 1977.

U.S. Department of Justice. Survey of Inmates of Correctional Facilities, 1974, Advance Report. LEA/NCJISS, 1976.

U.S. Department of Labor. Employment and Earnings: October 1975. Washington, D.C.: U.S. Government Printing Office, 1975.

U.S. Department of Labor. Employment and Earnings: October 1978. Washington, D.C.: U.S. Government Printing Office.

MANPOWER DEMONSTRATION RESEARCH CORPORATION
PUBLICATIONS ON SUPPORTED WORK

Ball, Joseph. Implementing Supported Work: Job Creation Strategies During the First Year of the National Demonstration, 1977.

Lefkowitz, Bernard. Highlights of Site Activities During the Planning Period of the Supported Work Demonstrations, 1976.

Manpower Demonstration Research Corporation. First Annual Report on the National Supported Work Demonstration, 1976.

Manpower Demonstration Research Corporation. Summary of the First Annual Report on the National Supported Work Demonstration, 1976.

Manpower Demonstration Research Corporation. Second Annual Report on the National Supported Work Demonstration, 1978.

Manpower Demonstration Research Corporation. Summary of the Second Annual Report on the National Supported Work Demonstration, 1978.

Masters, Stanley H. Analysis of Nine-Month Interviews for Supported Work: Results of An Early Sample, 1977.

Maynard, Rebecca A.; Garfinkel, Irwin; Leach, Valerie. Analysis of Nine-Month Interviews for Supported Work: Results of An Early AFDC Sample, 1977.

Maynard, Rebecca A.; Hollister, Robinson; Horner, David; Masters, Stanley H.; Piliavin, Irving; Johnson, Weldon T. Preliminary Analysis of Baseline Data Concerning Initial Enrollees in the Supported Work Sample, 1976.

Wooldridge, Judith. Summary Report on Selected Data from the Supported Work Management Information System, 1977.